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* Indicates that reports in the BIOS, CIOS and FIAT series are deposited in the Library of Congress Depository Libraries. For a complete list of these libraries, see page facing page 1, volume 5, of this Bibliography.

In addition to the indexes described on the back cover of this Bibliography, the following reference works are available from the Office of Technical Services:

PB L 87782. HOLLOWAY, O. WILLARD. American and British atomic energy reports: A list of reports on atomic energy released by the Office of Technical Services. Feb 1948. 30 p. Price: 75¢

PB L 81500. HOLLOWAY, O. WILLARD and ISAAC, OLIVER B. Classified list of OTS printed reports: A list of reports on German and Japanese technology, prepared by American investigators, which are available in printed form from the Office of Technical Services. Oct 1947. 59 p. Price: 75¢

PB L 58101-R. SWIFT, GRACE. Government document series, analyzed by Office of Technical Services. Rev. Nov 1947. 45 p. Price: 25¢

PB L 79322. SWIFT, GRACE and ORNE, JEROLD. Subject headings for technical libraries. Jun 1947. 167 p. Price: $1.50

PB L 81803. U. S. OFFICE OF TECHNICAL SERVICES, TECHNICAL INDUSTRIAL INTELLIGENCE DIVISION. Reports resulting from the investigation of German technology, 1945-1946, and index of personnel. May 1947. 207 p. Price: $5.25

ERRATA:

v. 7, p. 74 Entry for PB L 70082, Frames 8523-8525, erroneously listed as "Frames 8523-8585."

v. 8, p. 246 Entry for PB L 86853, Frames 5519-5528, erroneously listed as "PB L 86583."

v. 8, p. 281 Entry for PB L 68665-T erroneously listed as "PB L 68655-T."

v. 8, p. 668 PB L 73942 contains 670 unnumbered frames and has the following prices: Microfilm-$6.00 - Enlargement print-$67.00.

v. 7, p. 34 The correct enlargement print price for PB L 74401, Frames 9130-9187, is $6.00.

CHEMICALS AND ALLIED PRODUCTS

Dyes

PB L 70336. ABORGANA G.M.B.H., GENDORF, GERMANY. Various investigations on dyes. (FIAT Microfilm Reel C-7, Frames 6966-8176). 1932-1941. 1210f. Price: Microfilm -$6.00 - Enlargement print -$121.00. This reel was prepared by FIAT investigators in Germany. 157 individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
6966-6990 PB L 70336	Analytical market studies on the pre-war demand of natural lacquer raw materials and their utilization. By Lorenz. Oct 7, 1941. In German.	2.50
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6997-7003 PB L 70336	Production of cellulose esters from mixed anhydrides. By Schnegg. Sep 4, 1941. In German.	1.50
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7127-7132 PB L 70336	New dicarboxylic acid resins. By Hecht. Nov 15, 1940. In German.	1.50
7133-7140 PB L 70336	Development of some important products of the lacquer project. By Prillwitz. Oct 4, 1941. In German.	1.50
7141-7142 PB L 70336	Catalyst-hardening of condensation resins. By Prillwitz. Oct 4, 1941. In German.	1.50
7143-7148 PB L 70336	Properties of purely synthetic drying oils. By Rossmann. n.d. In German.	1.50
7149-7153 PB L 70336	Technical possibilities of utilizing the new polymerizate emulsions in the field of lacquers. By Cyllax. n.d. In German.	1.50
7154-7163 PB L 70336	Phenol acetylene resins. By Hecht. Sep 29, 30, 1941. In German.	1.50
7164-7168 PB L 70336	Lacquering resins from formaldehyde condensation products of heterocylic amines. Sep 29, 1941. In German.	1.50
7169-7183 PB L 70336	New experiences in the production of artificial resins from benzyl chloride and its higher homologues. Sep 20, 1941. In German.	1.50
7184-7190 PB L 70336	Softening and binding agents from furfural. By Wolfen. Sep 24, 1941. In German.	1.50
7191-7199 PB L 70336	Cyclohexanone-formaldehyde resins. By Meadnys. Sep 26, 1941. In German.	1.50
7200-7208 PB L 70336	The chemical surface treatment of iron as basis for varnish layers. By Buettner. Nov 15, 1940. In German.	1.50
7209-7220 PB L 70336	Nitrosodimethyl aniline and azine dyes. By Rudolf. Feb 24, 1932. In German.	1.50
7221 PB L 70336	Some physical qualities of substrates. By Mark. Feb 24, 1932. In German.	1.50
7222-7223 PB L 70336	Utilization of basic dyes for acetate rayon. By Hoff. Jan 22, 1932. In German.	1.50
7224-7230 PB L 70336	Basic dyes of the malachite green series from secondary arylamines substituted in ortho position. By Duftien. May 14, 1934. In German.	1.50
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7236-7241 PB L 70336	Utilization of arylalkylnitriles for producing triarylmethane dyes. By Krebs. May 14, 1934. In German.	1.50
7242-7251 PB L 70336	Studies on Rhoduline Blue 6 G and 5 B and suitable substitutes. By Roh. May 14, 1934. In German.	1.50
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7271-7280 PB L 70336	Experiments for producing yellow "Fanal-L-brands." By Kern and others. May 14, 1934. In German.	1.50
7281-7286 PB L 70336	Triphenylmethane dyes containing the tetrahydroquinoline-ring. By Krzikalla and others. May 14, 1934. In German.	1.50
7287-7292 PB L 70336	Experiments for producing triphenylmethane dyes capable of being chrome-developed by utilization of 8-oxyquinoline. By Krzikalla and Jakobi II. May 14, 1934. In German.	1.50
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7336-7340 PB L 70336 Dyes of rhodamine-like structure, containing the carbazole-ring. By Krzikalla and Jakobi II. May 14, 1934. In German. 1.50

7341-7347 PB L 70336 Commercial dextrins and their qualities. By Storch. May 14, 1934. In German. 1.50

7348-7372 PB L 70336 Evaluation of the scientific card-index, department I B Group:2; Acridines. By Teller. May 14, 1934. In German. 2.50

7373-7456 PB L 70336 The evaluation of the scientific card-index, department I B group 11 - basic ketone dyes and department III B group 9-acid ketone dyes. n.d. In German. 8.50

7457-7494 PB L 70336 Evaluation of the scientific card-index for the group of basic and acid auramines. By Kern. Apr 15, 1935. In German. 4.00

7495-7502 PB L 70336 Wool dyes of the acridone series. By Pardon. Apr 11, 1935. In German. 1.50

7503-7507 PB L 70336 Experiments for producing yellowish rhodamines as dyes for lacquers. By Teller. Apr 15, 1935. In German. 1.50

7508-7510 PB L 70336 Production of naphthyl rhodamines. By Teller. Apr 15, 1935. In German. 1.50

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7530-7533 PB L 70336 Experiments for producing a substitute for "Brilliant Wool Blue B extra." By Krzikalla and W. Wolff. Apr 15, 1935. In German. 1.50

7534-7535 PB L 70336 Ketone dyes containing the quinoline ring. By Krzikalla and W. Wolff. Apr 8, 1935. In German. 1.50

7536-7541 PB L 70336 Report on "Fluorol 5 G", a new lubricating oil dye. By Hopff and Heymann. Apr 15, 1935. In German. 1.50

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7564-7567 PB L 70336 New pigment dyes on phthalodinitrile basis. By Hopff and Steinbrunn. Jan 31, 1936. In German. 1.50

7568-7569 PB L 70336 Note on Wolfen's report at the 8th Scient. triphenylmethane committee. New acetate rayon dyestuffs on the principle of Schiff's bases. May 4, 1936. In German. 1.50

7570-7575 PB L 70336 New penetrating leather dyes. By Kern. Apr 15, 1936. In German. 1.50

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7637-7642 PB L 70336 Chromeable dyes from "Kresamin" benzoyl benzoic acid. By Kern. Apr 15, 1936. In German. 1.50

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7648-7652 PB L 70336 Experiments relating to the reaction development of induline melt. By Rudolf. Apr 15, 1936. In German. 1.50

7653-7655 PB L 70336 Main reaction process of induline melt. By Rudolf and Metz. May 18, 1936. In German. 1.50

7656-7658 PB L 70336 Testing heterocyclic ring systems for ketone dyes. By Kochendorfer and Bettag. Apr 15, 1936. In German. 1.50

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7685-7692 PB L 70336 Nitro oxazines and thiazines as penetrating agents for leather. By Krzikalla and Pardo. May 24, 1937. In German. 1.50

7693-7700 PB L 70336 Chromeable diphenyl amines and acridones II. By Krzikalla and Martin. May 24, 1937. In German. 1.50

7701-7708 PB L 70336 Chromeable triarylmethane dyes derived from aldehydosalicylic acids. By Krzikalla and Thode. May 18, 1937. In German. 1.50

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p-formyl-o-cresotic acid and diphenylamine derivatives. By Krzikalla and Alt. May 24, 1937. In German. 1.50

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7901-7907 PB L 70336 Halogenated, water soluble phthalocyanine sulfonic acids. By Wiest and Niemann. May 2, 1938. In German. 1.50

7908-7911 PB L 70336 Sulfonating products of copper phthalocyanines. By Niemann. May 2, 1938. In German. 1.50

7912-7916 PB L 70336 Production of water soluble phthalocyanine dyes from 4-sulfophthalic acid. By Jakobi. May 2, 1938. In German. 1.50

7917-7923 PB L 70336 The halogenation of "Heliogen Blue B" in the presence of organic acid chlorides. By Mühlbauer. May 2, 1938. In German. 1.50

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7930-7944 PB L 70336 The exchangeability of metals in metal phthalocyanines. By Mühlbauer. May 2, 1938. In German. 1.50

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7955-7967 PB L 70336 Testing the nigrosine melt. By Rudolf. May 2, 1938. In German. 1.50

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7999-8000 PB L 70336 Di-pyrazolonyl or di-acetoacetic acid-phenyl-methanes and their dyes. By Retter. May 6, 1938. In German. 1.50

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8012-8015 PB L 70336 New brown "Chromoxane" dyes. By Kern and Konig. May 13, 1938. In German. 1.50

8016-8018 PB L 70336 Basic indol-ketone dyes for viscose and "Vistra". By Wolff. May 11, 1938. In German. 1.50

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8162-8169 PB L 70336 — A new process for production of phthalocyanines free from metal. By Mühlbauer. May 3, 1939. In German. 1.50

8170-8176 PB L 70336 — The possibility of substituting heavy metals, especially copper, for the metal of phthalocyanine of alkaline earth metals. n.d. In German. 1.50

PB L 70336-S. ANORGANA G.M.B.H., GENDORF, GERMANY. Various investigations on dyes. (FIAT Microfilm Reel C-7, Frames 6966-8176, abstract cards). 1932-1941. 182p. Price: Microfilm-$4.00 - Photostat-$13.00
Brief abstracts of the individual items on the above reel C-7, PB 70336, prepared by FIAT personnel in Germany.

PB L 85716. BRITISH INTELLIGENCE OBJECTIVES SUB-COMMITTEE. Interrogation of Moehrle, Fischer and Kruber: Tar distillation. (Interrogation Rept 563). Aug 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
The interrogation concerned the continuous tar plant at Meiderich and naphthalene, and the production of tar acids.

PB L 73497. I.G.FARBENINDUSTRIE A.G. Report on dyes. (FIAT Microfilm Reel CC 126, Frames 3422-4323). 901f. 1929-1944. Prices: Microfilm $6.00 - Enlargement print-$90.50.
This FIAT microfilm reel contains 139 reports on research in the field of dyes and descriptions of processes for dyes. Individual items may be obtained as enlargement prints. Please include PB and frame numbers when ordering an individual report. In German. A list of these reports follows.

Frames	Title	Price
3422-3426 PB L 73497	"Kristallfuchsin". 1938. In German.	1.50
3427 PB L 73497	"Ledergelb 3 G". In German.	1.50
3428-3430 PB L 73497	Production of p-rosaniline. By Hager. 1938. In German.	1.50

Dyes (contd)

3431-3433 PB L 73497 Production of acid fuchsin. 1943. In German. 1.50

3434-3438 PB L 73497 "Phosphin E". 1939-1943. In German. 1.50

3439-3440 PB L 73497 "Saurefuchsin O". By Ebert. 1939. In German. 1.50

3441-3445 PB L 73497 "Phosphin E". 1937-1938. In German. 1.50

3446-3447 PB L 73497 Para-aminobenzaldehyde. By Fischer. 1935. In German. 1.50

3448-3455 PB L 73497 "Neufuchsin". By Ebert. 1939. In German. 1.50

3456-3513 PB L 73497 Basic and acid fuchsins. Apr 15, 1935. In German. 6.00

3514-3524 PB L 73497 Production of "Kristallfuchsin". By Fischer and Hager. 1937-1943. In German. 1.50

3525-3537 PB L 73497 Pararosaniline and rosaniline. By Hager. Sep 17, 1937. In German. 1.50

3538-3540 PB L 73497 p-Amino-benzaldehyde. By Fischer. 1935. In German. 1.50

3541-3550 PB L 73497 "Phosphin E". By Fischer and Ebert. 1937-1938. In German. 1.50

3551-3554 PB L 73497 "Lederbraun ET". By Ebert. 1939. In German. 1.50

3555-3556 PB L 73497 Leather Yellow GS. In German. 1.50

3557-3560 PB L 73497 Acid fuchsin. n.d. In German. 1.50

3561-3566 PB L 73497 Rosaniline and Pararosaniline from para-aminobenzaldehyde. By Voss. n.d. In German. 1.50

3567-3568 PB L 73497 Aqueous oxidation of "Paralenkanilin". 1939. In German. 1.50

3569 PB L 73497 List of manufacturing processes. Sep 22, 1944. In German. 1.50

3570-3571 3573-3574 PB L 73497 Tetranitrocarbazole. By W. Dohle. Jul 14, 1943 and Mar 21, 1944. In German. 1.50

3572, 3575 PB L 73497 "Gelbmehl" new. By W. Dohle. Jul 14, 1943 and Mar 21, 1944. In German. 1.50

3578-3581 PB L 73497 "Antichlor" (sodium hyposulfite.) By W. Dohle. Jul 28, 1935 and Aug 12, 1943. In German. 1.50

3582 PB L 73497 Sodium sulfide. Jul 28, 1935. In German. 1.50

3583-3605 PB L 73497 "Immedialschwarz" types. By W. Dohle. Jun 26, 1935 - Dec 1, 1938. In German. 2.50

3606-3622 PB L 73497 Alphabetical index of information reports 1941-1943 with technical contents. In German. 2.00

3623-3646 PB L 73497 Abbreviated index of the technical card file. In German. 2.50

3647-3650 PB L 73497 Flow sheet of apparatus for the manufacture of "Safranin", "Echtneublau 3 R" and "Methylenblau". 1938-1939. In German. 1.50

3651-3652 PB L 73497 List of manufacturing instructions for Thiazine, Oxazine, and Safranine dyes. In German. 1.50

3653-3665 PB L 73497 Methylene Blue Ia, ZF and ZF free from salt. May 2, 1932. In German. 1.50

3666-3667 PB L 73497 "Methylenblau Ia", Ia D" and "med". In German. 1.50

3668-3675 PB L 73497 "Methylenblau 2 AM" = "Thioninblau 90". Mar 1 and May 2, 1932. In German. 1.50

3676-3677 PB L 73497 "Methylenblau MT". In German. 1.50

3678-3681 PB L 73497 "Toluidinblau". Jan 28, 1930. In German. 1.50

3682-3688 PB L 73497 FM - New Methylene Blue (Methylene Blue NNX). Feb 1, 1930. In German. 1.50

3689-3691 PB L 73497 "Methylengrün". By Hoffmann. Dec 2, 1939. In German. 1.50

3692-3697 PB L 73497 "Echtneublau 3 R". By Hoffmann. Dec 11, 1939. In German. 1.50

3698-3700 PB L 73497 Paranitrosodimethylaniline. By Hoffmann. nd. In German. 1.50

3701-3705 PB L 73497 "Rhodulinreinblau 3 G". By Hoffmann. Jun 1 and Dec 15, 1939. In German. 1.50

3706-3708 PB L 73497 Nile Blue BX. By Hoffmann. Jan 6, 1940. In German. 1.50

3709-3721 PB L 73497 "Safranin T extra" conc. By Hoffmann. Jul 20, 1932. In German. 1.50

3722-3724 PB L 73497 Diethylsafranine crude 100%. By Hoffmann. Jan 23, 1939. In German. 1.50

3725-3726 PB L 73497 "Methylenviolett 3 RA extra" conc. By Hoffmann. Jan 23, 1939. In German. 1.50

3727-3733 PB L 73497 "Rhodulinheliotrop 3 B". By Hoffmann. Aug 10, 1939. In German. 1.50

3734 PB L 73497 Safranine - Base. By Klewno. Dec 2, 1937. In German. 1.50

3735 PB L 73497 "Amidogelb E" (= "Anthralangelb RRT"). By Hoffmann. Jan 16, 1940. In German. 1.50

3736-3737 PB L 73497 Amino Naphthol Brown 3 G. By Hoffmann. Jan 16, 1940. In German. 1.50

3738-3739 PB L 73497 Anthralan Brown 4 G. By Hoffmann. Jan 8, 1940. In German. 1.50

3740-3742 PB L 73497 Igelan Brown 3 G. By Hoffmann. Aug 25, 1939. In German. 1.50

3743-3744 PB L 73497 "Saureledebraun EGB". n.d. In German. 1.50

3745-3747 PB L 73497 "Fettblau Z". By Hoffmann. Jan 16, 1940. In German. 1.50

3748 PB L 73497 "Methylengrau I a." n.d. In German. 1.50

3749-3750 PB L 73497 Thionine (Violet of Lauth). By Hoffmann. Jun 15, 1943. In German. 1.50

3751 PB L 73497 Azomethines. n.d. In German. 1.50

3752-3755 PB L 73497 "Azomethin" color lakes from hydroxy anthraquinonealdehydes. By Coenen. May 7, 1941. In German. 1.50

3756-3764 PB L 73497 Dye syntheses with new salicylic aldehydes and aldehyde salicylic acids. By Coenen. Apr 1939. In German. 1.50

3765-3770 PB L 73497 Azomethines containing chromium. 3rd report. By Arzikalla and Dornheim. Apr 27, 1939. In German. 1.50

3771-3780 PB L 73497 Azomethines containing chromium. 2nd report. By Arzikalla and Gerloff. Apr 20, 1938. In German. 1.50

Dyes (contd)

3781 PB L 73497 — List of reports. n.d. In German. 1.50

3782-3789 PB L 73497 — Determination bis-sulfobenzene carboxylic acid ester of heptachlorodihydroxytriphenylmethane ("Eulan SN"). By Müller and Schüssler. May 17, 1941. In German. 1.50

3790-3800 PB L 73497 — Phenol ester of polychlorodihydroxytriphenylmethanes as moth-proofing agent. By Schüssler and Retter. May 17, 1941. In German. 1.50

3801-3808 PB L 73497 — Reaction conditions in the production of polychlorodihydroxytriphenylmethanes from aromatic aldehydes and halogen phenols. By Müller and others. May 17, 1941. In German. 1.50

3809-3816 PB L 73497 — "Amino-eulan" and some isomers, homologues, derivatives and conversion products. By Retter. May 17, 1941. In German. 1.50

3817-3828 PB L 73497 — The clarification of the constitution of "Mitin FF" of Geigy. By Müller. May 17. 1941. In German. 1.50

3829-3840 PB L 73497 — Quaternary ammonium compounds as moth-proofing agents. By Schüssler. May 17, 1941. In German. 1.50

3841-3848 PB L 73497 — New phosphonium compounds as insecticides. By Lommel and Münzel. May 17, 1941. In German. 1.50

3849-3865 PB L 73497 — "Amino-eulan" dyes. By Müller and Retter. May 17, 1941. In German. 2.00

3866-3877 PB L 73497 — Dipyrazolonylphenylmethane compounds as "Eulans". By W. Retter. May 3, 1939. In German. 1.50

3878 PB L 73497 — List of reports on phthalocyanines. n.d. In German. 1.50

3879-3882 PB L 73497 — Sulfonation of "Heliogen Blau GM". By Mühlbauer. May 3, 1939. In German. 1.50

3883-3890 PB L 73497 — The red intermediate stage in the formation of copper-phthalocyanine according to the acid amide process. By Mühlbauer. May 3, 1939. In German. 1.50

3891-3898 PB L 73497 — New process for the production of phthalocyanines free of metal. By Mühlbauer. May 3, 1939. In German. 1.50

3899-3905 PB L 73497 — The replacement of the alkaline earth metal of phthalocyanines by heavy metals, in particular copper. By Mühlbauer. May 3, 1939. In German. 1.50

3906-3909 PB L 73497 — New polymorphous modification of the metal free phthalocyanine ("Heliogen Blau GM"). By Von Lusich and Mühlbauer. May 3, 1939. In German. 1.50

3910-3915 PB L 73497 — On Zapon dyes of the phthalocyanine series. By Nadler. May 3, 1939. In German. 1.50

3916-3925 PB L 73497 — On octaphenyl - phthalocyanines. By H. Meyer and Mickert. May 3, 1939. In German. 1.50

3926-3962 PB L 73497 — Phthalocyanines. By Bienert, and Thielert. May 5, 1939. In German. 4.00

3963-3967 PB L 73497 — Action of trichloroacetic acid on phthalocyanine dyes. By Niemann. May 2, 1938. In German. 1.50

3968-3972 PB L 73497 — Preparation of water-soluble phthalocyanine dyes from 4-sulfo phthalic acid. By Jacobi. May 2, 1938. In German. 1.50

3973 PB L 73497 — List of reports on patent Blue and Naphthalene Green. n.d. In German. 1.50

3974-3976 PB L 73497 — Dye of the Patent Blue series from benzaldehyde -2,6-disulfonic acid. By Moehrke. May 17, 1941. In German. 1.50

3977-3979 PB L 73497 — Butyl naphthalene green dyes. By Loth. Feb 1, 1932. In German. 1.50

3980-3981 PB L 73497 — Dyes from naphthaldehydedisulfonic acid. By H. Lange. n.d. In German. 1.50

3982-3983 PB L 73497 — Dye from 1-naphthaldehydedisulfonic acid. By Dr. Franke. Nov 14, 1929. In German. 1.50

3984-3992 PB L 73497 — General survey of the action of the butyl group in triphenylmethane dyes. By Dr. Franke. Nov 14, 1929. In German. 1.50

3993-3995 PB L 73497 — The effect of longer aliphatic radicals on the color of the "Cyanols". By Böger. n.d. In German. 1.50

3996-3997 PB L 73497 — List of reports on scientific research. n.d. In German. 1.50

3998-4007 PB L 73497 — Chlorination products of toluic acids. By Coenen. Apr 1941. In German. 1.50

4008-4014 PB L 73497 — Condensation of active methylene bases with isocyanates and ketenes. By Coenen. May 8, 1941. In German. 1.50

4015-4018 PB L 73497 — Aminophenyl ureas. By Coenen. May 12, 1941. In German. 1.50

4019-4021 PB L 73497 — Regarding the production of arylhydrazines. By Kochendoerfer. Jun 15, 1941. In German. 1.50

4022-4033 PB L 73497 — Oxidation of basic diaminotriphenylmethanes. By Müller and Berres. May 17, 1941. In German. 1.50

4034-4037 PB L 73497 — Production of benzophenone sulfonic acids from chloro-benzophenones by pressing with sulfite. By Hess. May 17, 1941. 1.50

4038-4041 PB L 73497 — 4 - (4'-(diethylamino)phenyl) - benzaldehyde and dyes therefrom. By V. Freyberg. May 17, 1941. In German. 1.50

4042-4045 PB L 73497 — The chromatographic separation and purification of sulfonic acids for dyes. By Moehrke. May 17, 1941. In German. 1.50

4046-4052 PB L 73497 — The diphenylamino group as auxochrome in basic and acid dyes. By Moehrke and V. Freyberg. May 17, 1941. In German. 1.50

4053-4064 PB L 73497 — The effect of higher aliphatic alkyl groups on the properties of triphenylmethane dyes and polymethine dyes. By Moehrke and others. Apr 25, 1939. In German. 1.50

4065-4068 PB L 73497 — 1,2 - Dimethylindole -3- aldehyde. By Eistert. May 1, 1939. In German. 1.50

4069-4071 PB L 73497 — New indolines of the naphthalene series. By Kochendoerfer. May 1, 1939. In German. 1.50

4072-4077 PB L 73497 — Experiments on oxidizing "Methan base" to Michler's Ketone. By Bottag. May 1, 1939. In German. 1.50

4078-4082 PB L 73497 — The effect of higher aliphatic radicals on the dyeing properties of acid triphenylmethane dyes. By Wolff. Apr 26, 1938. In German. 1.50

4083-4090 PB L 73497 — The effect of fluorine on the fastness to light and shade of dyes of the triphenylmethane series. By G. Remiers. Apr 21, 1938. In German. 1.50

4091-4094 PB L 73497 — Secondary alkylanilines from "Schiff bases". By Heddelim. Jun 18, 1937. In German. 1.50

4095-4097 PB L 73497 — Acetone - anil. By Heddelim. Jun 18, 1937. In German. 1.50

4098-4100 4102-4105 PB L 73497 — Scientific research in the field of triphenylmethane dyes. Apr 15, 1935. In German. 1.50

4101 PB L 73497 — Page 3 of the report is missing.

4106-4109 4120-4123 PB L 73497 — The action of diazo compounds on substances of the type of para, para-tetraalkyldiamido-triphenylmethanes or diphenylmethanes respectively, furthermore on tetramethyldiaminobenzhydrol. By Günther. May 14, 1934. In German. 1.50

4110-4119 PB L 73497 — Do not exist. Nothing missing.

4124-4127 PB L 73497 — Viridines and substituted chalcones. By Berres. n.d. In German. 1.50

4128-4130 PB L 73497 — Dyes from Schulemann aldehydes. By Müller. n.d. In German. 1.50

4131-4136 PB L 73497 — Dyes from azo - aldehydes. By Müller. n.d. In German. 1.50

4137-4140 PB L 73497 — Carboxylic acid triphenylmethane dyes. By Müller. n.d. In German. 1.50

4141 PB L 73497 — Experiments for exchanging movable halogen in triphenylmethane dyes for para-toluene sulfinic acid. By Müller. n.d. In German. 1.50

4142 PB L 73497 — Reaction of "Brilliant-Säuregrun 6 B" with para-toluene-sulfamide. By Müller. n.d. In German. 1.50

4143 PB L 73497 — Formulas for 3 acid wool dyes. By Blömer. n.d. In German. 1.50

4144 PB L 73497 — Missing due to faulty numbering.

4145-4156 PB L 73497 — Scientific work concerning various groups of triphenylmethane dyes. May 14, 1934. In German. 1.50

4157-4160 PB L 73497 — Scientific laboratory work in the field of triphenylmethane dyes. May 11, 1934. In German. 1.50

4161-4163 PB L 73497 — Cold dyeing products of the Brown series, fast to washing. By Haagen. n.d. In German. 1.50

4164-4167 PB L 73497 — Sulfur dyes from coronene and some of its substitution products. By Haagen. n.d. In German. 1.50

4168-4172 PB L 73497 — Sulfur dyes from pyrene and pyrenequinones. By Matthern. n.d. In German. 1.50

4173-4173A PB L 73497 — Program for the 8 scientific "Schwako" (sulfur dyes committee) of 28 February 1941 and list of the patent applications to be exchanged in the meeting. n.d. In German. 1.50

4174-4178 PB L 73497 — The thiosulfonic acids of the "Hydron Blau bases" and the dyes therefrom. By Siehler. Feb 28, 1941. In German. 1.50

4179-4187 PB L 73497 — Sulfur dyes from acylaminodiarylamines, their carboxylic acids and sulfonic acids. By Hechtenberg. Feb 28, 1941. In German. 1.50

4188-4191 PB L 73497 — Investigations of sulfur dyes of the carbazole series. By Hechtenberg. Feb 28, 1941. In German. 1.50

4192-4197A PB L 73497 — New sulfur dyes of the oxazone and thiazone series. By Schubert. Feb 15, 1941. In German. 1.50

4198-4202 PB L 73497 — The effect of aldehydes on sulfur dyes. By Kohl. Feb 18, 1941. In German. 1.50

4203-4206 PB L 73497 — Sulfur dyes from diazadibenzpyrene. By Schütz. Feb 15, 1941. In German. 1.50

4207-4213 PB L 73497 — Sulfur and vat dyes from acridones. By Hechtenberg. Feb 15, 1941. In German. 1.50

4213A-4220 PB L 73497 — Thioglycolic acid and similar compounds as reduction agents in dyeing with sulfur dyes. By Kohl. Feb 18, 1941. In German. 1.50

4220A-4220I PB L 73497 — The most important patent applications and dyes of competitors. By Murawski. Feb 18, 1941. In German. 1.50

4221-4224 PB L 73497 — The production of 2,4- and 2, 6-benzaldehyde disulfonic acid from the corresponding dichlorobenzaldehydes by pressing with neutral sulfite. By V. Freyberg. May 17, 1941. In German. 1.50

4225-4228 PB L 73497 — Polymethine dyes from dialdehydes. By v. Freyberg. May 17, 1941. In German. 1.50

4229-4232 PB L 73497 — 4 - (4' - (Diethylamino) phenyl) - benzaldehyde and dyes therefrom. n.d. In German. 1.50

4233-4238 PB L 73497 — Substituted indolinones and dyes therefrom (II). By V. Freyberg. May 17, 1941. In German. 1.50

4239-4245 PB L 73497 — The influence of the position of the sulfonic groups on the levelling properties of indolyl fast dyes. By Schäfer. May 17, 1941. In German. 1.50

4246-4254 PB L 73497 — The influence of the ortho-fixed auxiliary group on the levelling properties of indolyl fast dyes. By Beniers. May 17, 1941. In German. 1.50

4255-4261 PB L 73497 — The production of ortho-sulfo benzoic anhydride. By Beniers. May 17, 1941. In German. 1.50

4262-4265 PB L 73497 — The production of benzophenone sulfonic acids from chloro benzophenones by pressing with sulfite. n.d. In German. 1.50

4266-4271 PB L 73497 — The production of ortho-sulfobenzoic anhydride. n.d. In German. 1.50

4272-4278 PB L 73497 — The diphenylamine group as auxochrome in basic and acid dyes. n.d. In German. 1.50

4279-4281 PB L 73497 — A dye of the patent blue series produced from benzaldehyde -2,6-disulfonic acid. n.d. In German. 1.50

4282-4285 PB L 73497 — The chromatographic separation and purification of dye sulfonic acid. n.d. In German. 1.50

4286-4290 PB L 73497 — The effect of the sulfonation degree on levelling properties of "Wollechtblau FBL". By Loth. May 17, 1941. In German. 1.50

4291-4310 PB L 73497 — Annual report of the photographic-scientific department for the year 1941. By Berlin and Heinke. Mar 1, 1942. In German. 2.00

4311-4323 PB L 73497 — Annual report 1940, photographic-scientific laboratory. By Berlin. Mar 1, 1941. In German. 1.50

Dyes (contd)

PB L 73497-S. I.G. FARBENINDUSTRIE A.G. Reports on dyes. (FIAT Microfilm Reel CC 126, Frames 3423-4323, abstract cards). 150p. Price: Microfilm-$3.00 Photostat-$10.00

These are short abstracts of the items on reel CC 126, (PB 73497) listed above. There were prepared by FIAT abstracters in Germany.

PB L 73494. I.G. FARBENINDUSTRIE A.G. Reports on dyes and dye intermediates. (FIAT Microfilm Reel C 6, Frames 5564-6965) 1934-1938. 701f. Price: Microfilm-$6.00 - Enlargement print-$70.50.

This FIAT microfilm reel consists of 280 reports from the Höchst, Leverkusen, and Wolfen plants of I.G. for the years 1934-1938. The reports deal mainly with research on azo and nitro dyes, pigment and lake dyes, and chrome dyes. The tests were conducted on cotton, wool, acetate rayon, and leather and included dyeing in neutral, acid, and alkaline medium. The individual reports, listed below will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. The reports are in German.

Frames	Title	Price
5564-5570 PB L 73494	Testing of the action of phosgene and phosgene-pyridine on Azodyes (B-naphthol couplings) in anhydrous organic solvents. By Schwitzer. n.d. In German.	$1.50
5571 PB L 73494	Wool dyes. By Messmer. Sep 9, 1938. In German.	1.50
5572-5574 PB L 73494	Experiments with Ergan-soga dyes or their substitution products. By Modersohn. Sep 9, 1938. In German.	1.50
5575-5576 PB L 73494	Benzo Fast Copper-Dyes from nitrohydroxybenzoyl chlorides. By Rohm. Sep 12, 1938. In German.	1.50
5577 PB L 73494	"Wollstra"-dyeings with naphthols. By Rohm. Sep 12, 1938. In German.	1.50
5578-5580 PB L 73494	Experiments to avoid subsequent yellowing of acetate rayon at dyeings developed with beta-naphthol in fabrics mixed with this fiber. By Rabe and Roos. Sep 3, 1938. In German.	1.50
5581-5584 PB L 73494	Experiments on red diazo dyes. By Roos. Aug 29, 1938. In German.	1.50
5585-5586 PB L 73494	Anomalous chrome dyestuffs from beta-naphthylamine derivatives. By Schrum. Sep 1, 1938. In German.	1.50
5587 PB L 73494	Chrome dyes from 6-amino-methyl-umbelliferone. Sep 12, 1938. In German.	1.50
5588-5590 PB L 73494	Dyes from some recently manufactured pyrazolones. By Schrum. Sep 12, 1938. In German.	1.50
5591 PB L 73494	Experiments for the manufacture of self-coupling diazoamino compounds. By Schrum. n.d. In German.	1.50
5592-5598 PB L 73494	Experiments for the improvement of the fastness to wet processing of soluble dyes by simple aftertreatment. By Schubert. Sep 9, 1938. In German.	1.50
5599-5601 PB L 73494	Cotton dyes from diaminoazobenzene. By Suckfell. Sep 10, 1938. In German.	1.50
5602-5609 PB L 73494	Ergan-soga dyes. By Suckfuell. Sep 8, 1938. In German.	1.50
5610-5613 PB L 73494	The symmetric azo substances from aminonaphtholsulfonic acids. By Suckfuell. Sep 8, 1938. In German.	1.50
5614-5619 PB L 73494	2,5,8- and 2,8,5- aminonaphtholsulfonic acid and their dyes. By Zervas. Sep 9, 1938. In German.	1.50
5620-5624 PB L 73494	Manufacture of carboxyaminobenzoyl-J-acids. By Zervas. Sep 9, 1938. In German.	1.50
5625-5627 PB L 73494	Grey chrome dyes. By Zervas. Sep 1, 1938. In German.	1.50
5628-5629 PB L 73494	New diazotising components for Benzoechtkupfer (Benzo Fast Copper) dyes. By Zervas. Sep 1, 1938. In German.	1.50
5630-5632 PB L 73494	Watersoluble azo dyes for acetate rayon forming complexes with salts of heavy metals. By Altner. Sep 10, 1938. In German.	1.50
5633-5634 PB L 73494	Superficial leather dyes. By Fellmer. Sep 10, 1938. In German.	1.50
5635-5638 PB L 73494	Grey to black Erganil dyestuffs. By Fellmer. Sep 10, 1938. In German.	1.50
5639-5643 PB L 73494	Production of Benzoechtorange (Benzo Fast Orange) and Benzoechtscharlach (Benzo Fast Scarlet) brands. By Mans. Sep 1, 1938. In German.	1.50
5644-5645 PB L 73494	General. Nitrations of naphthol ester sulfonic acids. By Messmer. Sep 7, 1938. In German.	1.50
5646-5647 PB L 73494	Cotton dyes. Dyes compared with recent competition products. By Messmer. Sep 9, 1938. In German.	1.50
5648 PB L 73494	Benzo Fast Copper dyes. By Messmer. Sep 9, 1938. In German.	1.50
5649 PB L 73494	Leather dyes. By Messmer. Sep 8, 1938. In German.	1.50
5650-5655 PB L 73494	6-Sulfo-2,3-hydroxynaphthoic acid arylides as coupling components for Naphthol AS dyeings on "Wollstra." By Morschel and Muessler. Oct 28, 1938. In German.	1.50
5656-5657 PB L 73494	1-Phenyl-5-hydroxytriazole as yellow component. By Suckfuell. Sep 16, 1938. In German.	1.50
5658-5661 PB L 73494	Säurelederbraun EGH. (Acid Leather Brown EGH). Constitution explained. By W. Lange. 1938. In German.	1.50
5661-5662 PB L 73494	Oxidation products of primary disazo- and trisazo dyes from resorcinol and m-aminophenol. By W. Lange. 1938. In German.	1.50
5662-5664 PB L 73494	Azo dyes from nitrophenyl-aminonaphtholsulfonic acids and nitrophenyl-hydroxynaphthylimidazoles. By W. Lange. n.d. In German.	1.50
5664 PB L 73494	Azo-dyes from nitro-diazo-H-acid. By W. Lange. 1938. In German.	1.50
5664 PB L 73494	Azo dyes from diazotized 2-amino-4-nitrodimethylaniline. By W. Lange. 1938. In German.	1.50
5664-5665 PB L 73494	Dyes of the type of Säurelederbraun ER and ET (Acid leather Brown ER and ET.) By W. Lange. 1938. In German.	1.50
5666-5667 PB L 73494	Oxidation products of azo dyes from resorcinol, resorcylic acid, m-aminophenol and their derivatives. By W. Lange. 1938. In German.	1.50
5667-5669 PB L 73494	Azo dyes from pyrogallol and their metal compounds. By W. Lange. 1938. In German.	1.50
5669 PB L 73494	Dyes from nitroaminosalicylic acid. By W. Lange. 1938. In German.	1.50
5669-5670 PB L 73494	Dyes from nitrated diazo-E-acid. By W. Lange. 1938. In German.	1.50

Dyes (contd)

5670-5671 PB L 73494 — Dyes from asymmetrically dimethylated diamines. By W. Lange. 1938. In German. 1.50

5671 PB L 73494 — Dyes from twice coupled H acid. By W. Lange. 1938. In German. 1.50

5672-5676 PB L 73494 — The influence of azo components on the dischargeability of azo wool dyes. 1938. In German. 1.50

5677-5678 PB 73494 — 1,3-Dimethyl-2-aminobenzene-4-carboxylic acid as active components for azo wool dyes. By H. Ohlendorf. 1938. In German. 1.50

5679-5683 PB L 73494 — New chrome and metachrome dyes. By Hoffmann. 1938. In German. 1.50

5684-5689 PB L 73494 — Red chrome dyes. 1938. In German. 1.50

5690-5691 PB L 73494 — Chromechtschwarz 2 BL (Chrome Fast Black 2 BL.) By Hoffmann. 1938. In German. 1.50

5692-5697 PB L 73494 — Substantive dyes for the one-bath dyeing process of "Wollstra." By Keller. 1938. In German. 1.50

5698-5703 PB L 73494 — Experiments on acetate rayon dyes. By Ohlendorf, and others. 1938. In German. 1.50

5704-5705 PB L 73494 — Azo dyes from 1,2 - dihydroxylbenzenes and their oxidation products. By W. Lange. 1938. In German. 1.50

5706 PB L 73494 — Oxidation of monoazo dyes from diazotized aminonaphtholsulfonic acid-m-phenylenediamine or m-aminophenol. By W. Lange. 1938. In German. 1.50

5707 PB L 73494 — Metal-containing dis- and trisazo dyes containing the H acid-resorcinol combination. By W. Lange. 1938. In German. 1.50

5708-5715 PB L 73494 — Acid Leather dyes from diphenylamine derivatives. By Matthaen. 1938. In German. 1.50

5715-5718 PB L 73494 — Penetrating leather dyes. By Dreyer. 1938. In German. 1.50

5719-5731 PB L 73494 — Sudan dyes from p-alkyl-phenols and from alkyl resorcinol. By Baumann and A. Thurm. 1938. In German. 1.50

5731-5732 PB L 73494 — Sudan dyes from isohexylresorcinol. By Baumann and A. Thurm. 1938. In German. 1.50

5733-5735 PB L 73494 — Tests on two-tone printing dyes. By A. Thurm and Baumann. In German. 1.50

5736-5741 PB L 73494 — New chrome and metachrome dyes. By Benade and Hoffmann. 1938. In German. 1.50

5742 PB L 73494 — Improved Chicago Blue RW - process. By Kuhler. 1938. In German. 1.50

5743-5744 PB L 73494 — Substantive dyes from 2,6-hydroxynaphthoic acid. By Benade. 1938. In German. 1.50

5745-5750 PB L 73494 — Constitution of Igenal Brown GH. By W. Lange. 1938. In German. 1.50

5750-5751 PB L 73494 — Metal-containing dis- and trisazo dyes containing the H acid - resorcinol combination. By W. Lange. 1938. In German. 1.50

5751 PB L 73494 — Metal-containg dyes of the type o-aminophenol → resorcinol ← nitro-m-phenylenediamine. By W. Lange. 1938. In German. 1.50

5751-5752 PB L 73494 — Superficial trisazo dyes from resorcinol. By W. Lange. 1938. In German. 1.50

5752 PB L 73494 — Monoazo dyes from diazotized nitro-m-phenylenediamine as dyeing agents of the I - (P) series. By W. Lange. 1938. In German. 1.50

5753-5756 PB L 73494 — Acid leather dyes from diphenylamine derivatives. By Matthaen. 1938. In German. 1.50

5757-5760 PB L 73494 — Work on acetate rayon dyes. By H. Ohlendorf, and Lange. 1938. In German. 1.50

5760-5761 PB L 73494 — Penetrating dyes. By Ohlendorf and Lange. 1938. In German. 1.50

5761-5763 PB L 73494 — "Cellitazoles." By H. Ohlendorf and Lange. 1938. In German. 1.50

5764-5767 PB L 73494 — Experiments on two-tone printing dyes. By Thurm and Baumann. 1938. In German. 1.50

5768-5770 PB L 73494 — Experiment on Sudan dyes. By Baumann and Thurm. 1938. In German. 1.50

5771-5772 PB L 73494 — Chrome dyes, containing an o-aminobenzenesulfanthranilide group. By Hoffmann. 1938. In German. 1.50

5773-5775 PB L 73494 — Experiments in the Sirius Light Red series. By Keller. 1938. In German. 1.50

5776 PB L 73494 — Improvement of the discharge of Columbiaechtschwarz G extra (Columbia Fast Black G extra) (Kunstseidenschwarz G) (Rayon Black G). By Kohler. 1938. In German. 1.50

5777-5780 PB L 73494 — Experiments on Igenal dyes. By W. Lange. 1938. In German. 1.50

5781-5784 PB L 73494 — Penetrating leather dyes. By Matthaen. 1938. In German. 1.50

5785-5788 PB L 73494 — Substantive dyes from 2,6-hydroxynaphthoic acid. By Benade. 1938. In German. 1.50

5789-5792 PB L 73494 — Research in the Supranol Brown series. By Keller. Oct 13, 1938. In German. 1.50

5793-5797 PB L 73494 — A new process for the production of 2-naphthol-4-sulfonic acid and derivatives. By Keller. Oct 13, 1938. In German. 1.50

5798-5803 PB L 73494 — New chrome and metachrome dyes. By Benade and Hoffmann. Sep 12, 1938. In German. 1.50

5804-5806 PB L 73494 — Conversion products of 2,3-dichloro-1-nitrobenzene and dyes therefrom. By Schoellig. 1938. In German. 1.50

5807-5809 PB L 73494 — Penetrating leather dyes. By Matthaen. Oct 13, 1938. In German. 1.50

5810 PB L 73494 — Vesuvin BL new. By Muller. 1938. In German. 1.50

5810-5811 PB L 73494 — Diazodunkelblau B. (Diazo Dark Blue B.) By Muller. 1938. In German. 1.50

5811 PB L 73494 — Columbiaechtschwarz G extra. (Columbia Fast Black G extra) By Muller. 1938. In German. 1.50

5812-5827 PB L 73494 — "Cellitazoles", derived from 4,4'-diamino-azo benzene. By W. Lange. Oct 13, 1938. In German. 1.50

5828-5831 PB L 73494 — 4,5-Dinitro-2-aminophenolmethyl ether as active component for acetate rayon dyes. By H. Ohlendorf. Oct 13, 1938. In German. 1.50

Dyes (contd)

5832-5833 PB L 73494 — Dyes with compounds having N-alkylphenylamino-2,3-propylene oxide as passive components. By H. Ohlendorf and Lange. Oct 13, 1938. In German. 1.50

5834-5836 PB L73494 — 3-Arylamino-tetrahydrofurans as components for the synthesis of acetate rayon dyes. By H. Ohlendorf and Lange. Oct 13, 1938. In German. 1.50

5837-5839 PB L 73494 — 3-Arylamino-1-hydroxybutane and 3-arylamino-1,2-dihydroxybutane as components for the synthesis of acetate rayon dyes. By H. Ohlendorf and Wolfgang Richter. Oct 13, 1938. In German. 1.50

5840-5843 PB L 73494 — Research on Sudan dyes. By Thurm. Oct 13, 1938. In German. 1.50

5844-5869 PB L 73494 — Research in the Naphthol AS field. By Zitzsche. 1938. In German. 1.50

5870-5915 PB L 73494 — Research in the Naphthol AS field. By Zitzscher. Dec 10,11, 1936. In German. 2.50

5916-5921 PB L 73494 — Naphthol AS dyes soluble in organic solvents. By Fischer I. 1936. In German. 1.50

5922-5937 PB L 73494 — Research in the Naphthol AS field. By Zitzscher. Jun 24,25, 1937. In German. 1.50

5938-5953 PB L 73494 — Research in the Naphthol AS field. By Zitscher. Dec 14, 15, 1937. In German. 1.50

5954-5958 PB L 73494 — Naphthol AS dyes soluble in organic solvents. By Fischer I. 1937. In German. 1.50

5959-5982 PB L 73494 — Research in the Naphthol AS field. By Zitscher. Nov 3,4, 1938. In German. 1.50

5983-5996 PB L 73494 — Leather dyes. By Hager. Jul 3,4, 1934. In German. 1.50

5997 PB L 73494 — Brown azo dyes for leather. 1935. In German. 1.50

5998-6005 PB L 73494 — Leather dyes. By Fischer. Mar 28, 1935. In German. 1.50

6006-6012 PB L 73494 — Neutral-dyeing acid wool dyes. By Fischer. Nov 27, 1935. In German. 1.50

6013-6018 PB L 73494 — Further experiments with nitro dyes on wool. By Fischer and Gmelin. Nov 27, 1935. In German. 1.50

6019-6020 PB L 73494 — Preliminary information on dyes based on Neptune Brown. By Fischer and Gmelin. Nov 28, 1935. In German. 1.50

6021-6027 PB L 73494 — Acid wool dyes and afterchroming dyes from sulfonic acids of 5-hydroxyacenaphthenes. By Sander. Dec 3, 1935. In German. 1.50

6028-6031 PB L 73494 — Afterchroming dyes and chrome compounds of the nitro dye series. By Fischer. Dec 2, 1935. In German. 1.50

6032-6033 PB L 73494 — Chrome dyes with urethanes of aminonaphthols as coupling components. By Fischer and Gmelin. Dec 2, 1935. In German. 1.50

6034-6041 PB L 73494 — On Palatinechtfarbstoffe (Palatine Fast Dyes). By Fischer. Dec 6, 1935. In German. 1.50

6042-6043 PB L 73494 — Acetate rayon dyes with 4-nitro-1-naphthylamine and 1-nitro-2-naphthylamine as diazo components. By Fischer and Lang. Nov 28, 1935. In German. 1.50

6044-6046 PB L 73494 — Improvement of the quality of Dianilgelb 3 G (Dianil Yellow 3 G.) By Ritze. Dec 5, 1935. In German. 1.50

6047-6051 PB L 73494 — Further experiments with nitro dyes on leather. By Fischer and Gmelin. Nov 28, 1935. In German. 1.50

6052-6054 PB L 73494 — Superficial - and penetrating - dyes leather dyes. By Huss. Nov 26, 1935. In German. 1.50

6055-6065 PB L 73494 — Leather dyes with a 5-aminoacenaphthenesulfonic acid as starting component. By Huss. Nov 26, 1935. In German. 1.50

6066-6067 PB L 73494 — Experiences with Vulkanechtrot (Vulkan Fast Red) 5B and 2B. By Ritze. Dec 5, 1935. In German. 1.50

6068 PB L 73494 — Dyes from 2-amino-6-chlorochrysene and 2-amino-6-bromochrysene. By Ritze. Dec 5, 1935. In German. 1.50

6069-6076 PB L 73494 — Influence of the position of substituents of nitroamines on the properties of azo pigment dyes made therefrom. By Franke. Dec 3, 1935. In German. 1.50

6077-6080 PB L 73494 — Acetoacetic derivatives of substituted naphthylamines in the pigment and Vulkan dyes series. By Funke and Lang. Dec 5, 1935. In German. 1.50

6081-6084 PB L 73494 — Pyrazolone lake dyes with the use of beta tetralamine (beta aminotetralin-o- sulfonic acid. By Fischer and Gmelin. Nov 29, 1935. In German. 1.50

6085-6086 PB L 73494 — Monoacyl-nitro-diamines as diazo components in pigment and lake dyes. By Fischer and Lang. Nov 29, 1934. In German. 1.50

6087-6088 PB L 73494 — Improvement of oil fastness of "Permanent" dyes. By Funke. Dec 3, 1935. In German. 1.50

6089-6090 PB L 73494 — Green lake dyes from diaminoacenaphthenesulfonic acid. By Huber. Dec 3, 1935. In German. 1.50

6091 PB L 73494 — Lackbordo (Lake Claret) 3311 substituted by bromine. By Huber. Dec 3, 1935. In German. 1.50

6092-6093 PB L 73494 — New combinations in the Hansagelb (Hansa Yellow) series. By Huber. Dec 3, 1935. In German. 1.50

6094-6095 PB L 73494 — Yellow solvent-fast pigments. By Huber. Dec 2, 1935. In German. 1.50

6096-6100 PB L 73494 — Lake and pigment dyes with nitronaphthylamines as diazo components. By Fischer and Lang. Dec 3, 1935. In German. 1.50

6101-6105 PB L 73494 — Pigment and lake dyes with a 5-aminoacenaphthene as diazo component. By Huss. Nov 26, 1935. In German. 1.50

6106-6109 PB L 73494 — Nitroamine benzene sulfamides as diazo components in lake and pigment dyes. By Fischer and Gmelin. Nov 29, 1935. In German. 1.50

6110-6111 PB L 73494 — Yellow pigment dyes from acetoacetic-4-chloro-1-amino-2,5-hydroquinone-dimethyl ether. By Funke and Elbe. Dec 2, 1935. In German. 1.50

6112-6114 PB L 73494 — New dyes from 4-methyl-3-methoxy-6-amino-1-phenylether and from 4-chloro-3-methyl-6-amino-1-phenylether. By Funke and Elbe. Dec 2, 1935. In German. 1.50

6115-6118 PB L 73494 — Some pigments from diamines. By Funke and Beck. Dec 2, 1935. In German. 1.50

6119-6121 PB L 73494 — The Vulkan Fast Blue R process. By Beck. Dec 2. 1935. In German. 1.50

6122-6123 PB L 73494 — Testing of different acetoacetic compounds in the Hansagelb (Hansa Yellow) field. By Fischer and Gmelin. Dec 2, 1935. In German. 1.50

6124-6127 PB L 73494 — Different tests. By Fischer and Gmelin. Dec 4, 1935. In German. 1.50

6128-6131 PB L 73494 The use of diazoamino compounds as coupling components. By Kracker and Schmid. Dec 6, 1935. In German. 1.50

6132-6135 PB L 73494 Nitro and azo dyes dyeing at low temperatures. By Fischer and Gmelin. Oct 22, 1936. In German. 1.50

6136-6140 PB L 73494 Nitro dyes on wool. By Fischer and Gmelin. n.d. In German. 1.50

6141-6143 PB L 73494 Acid wool dyes from 3-aminobenzenesulfodimethylamide-4-sulfonic acid. By Fischer and Lang. Nov 2, 1936. In German. 1.50

6144-6146 PB L 73494 Different tests (production of azo dyes). By Fischer. Oct 27, 1936. In German. 1.50

6147-6148 PB L 73494 Some after-chroming dyes. By Fischer. Oct 23, 1936. In German. 1.50

6149-6150 PB L 73494 8-Hydroxyquinoline-nitro dyes. By Fischer. Oct 23, 1936. In German. 1.50

6151-6165 PB L 73494 Palatinechtfarben (Palatin Fast Dyes). By Fischer. Oct 26,27,22, 1936. In German. 1.50

6166-6168 PB L 73494 Leather dyes with a 5-aminoacenaphthenesulfonic acid as starting component. By Huss. Oct 20, 1936. In German. 1.50

6169-6180 PB L 73494 Superficial and penetrating leather dyes, with sulfalkylaminonaphtholsulfonic acids. By Huss. Oct 27, 1936. In German. 1.50

6181-6182 PB L 73494 Superficial grey leather dyes fast to light. By Huss. Oct 27, 1936. In German. 1.50

6183-6186 PB L 73494 Superficial and penetrating leather dyes, with aminobenzylsulfonic acids as starting components. By Fischer and Huss. Oct 29, 1936. In German. 1.50

6187-6188 PB L 73494 Superficial azo dyes for leather from starting components with aliphatic COOH group. By Huss. Oct 28, 1936. In German. 1.50

6189-6194 PB L 73494 Condensation products from halonitrobenzenes with aminobenzenes, containing a sulfomethyl group. By Huss. Oct 28, 1936. In German. 1.50

6195-6201 PB L 73494 Nitro dyes on leather. By Fischer and Gmelin. Dec 10, 11, 1936. In German. 1.50

6202-6206 PB L 73494 Leather dyes. By Fischer. Oct 30, 1936. In German. 1.50

6207-6218 PB L 73494 Leather dyes. By Fischer and Gmelin. Nov 4,9, 1936. In German. 1.50

6219 PB L 73494 Missing

6220-6230 PB L 73494 The problem of blending pigment dyes. By Funke and Elbs. Nov 3, 1936. In German. 1.50

6231-6238 PB L 73494 The physical state of pigments in the form of paste and powder. By Funke and Elbs. Nov 3, 1936. In German. 1.50

6239-6241 PB L 73494 New Vulkan dyes from carboxylamides. By Hisse. Nov 3, 1936. In German. 1.50

6242-6244 PB L 73494 Azo pigments from derivatives of aminobenzophenone. By K. Beck. Nov 4, 1936. In German. 1.50

6245-6247 PB L 73494 Contribution to the class of the new Vulkan dyes from carboxylamides. By K. Beck. Nov 2, 1936. In German. 1.50

6248-6250 PB L 73494 Nitroaminobenzenesulfamides as diazo components in lake and pigment dyes. By Fischer and Lang. Oct 29, 1936. In German 1.50

6251-6253 PB L 73494 Some pigment dyes from naphtholsulfones. By Funcke. Nov 5, 1936. In German. 1.50

6254-6255 PB L 73494 Metal lakes from some new azo dyes. By K. Beck. Nov 4, 1936. In German. 1.50

6256-6257 PB L 73494 Couplings of o-amino-diaryl ethers with 2-hydroxynaphthoic acid arylides. By Huber. Nov 2, 1936. In German. 1.50

6258-6260 PB L 73494 Naphthol AS-ITR as coupling components in Permanent Dyes. By Fischer and Huber. Nov 2, 1936. In German. 1.50

6261-6262 PB L 73494 Permanent dyes from 3 fast sulfamide bases. By Huber. Nov 2, 1936. In German. 1.50

6263-6264 PB L 73494 Aminoterephthalic acid dimethyl ester and Anthralanrotbase (Anthralan Red Base) as diazo components for lake dyes. By Huber. Nov 2, 1936. In German. 1.50

6265-6267 PB L 73494 Various trifluoride compounds as bases for lake dyes. By Huber. Nov 2, 1936. In German. 1.50

6268-6275 PB L 73494 The action of some substituents in dyes of the Hansagelb (Hansa Yellow) range. By Funke. Nov 3, 1936. In German. 1.50

6276-6279 PB L 73494 Influence on the shade of azo pigments by additions. By Funke and Hisse. Nov 5, 1936. In German. 1.50

6280-6283 PB L 73494 Chrome printing on cotton. By Fischer. Nov 2, 1936. In German. 1.50

6284-6290 PB L 73494 Cotton dyes from aminotrifluoro-methylsulfonic acids. By Huss. Nov 10, 1936. In German. 1.50

6291-6292 PB L 73494 Some cotton dyes from 3-aminobenzenesulfodimethylamide-4-sulfonic acid. By Fischer. Nov 1, 1936. In German. 1.50

6293-6294 PB L 73494 4,4' -Diaminocyanostilbene as tetrazo component. By Fischer. Oct 28, 1936. In German. 1.50

6295-6299 PB L 73494 Water-soluble acetate rayon dyes. By Fischer. Nov 11, 1936. In German. 1.50

6300-6302 PB L 73494 Acetate rayon dyes. By Gmelin and Fischer. Oct 29, 1936. In German. 1.50

6303-6304 PB L 73494 Blue 4022 o-dianisidine Naphthol AS-BO for dyeing of acetate rayon spinning solution. By Karl Beck. Nov 4, 1936. In German. 1.50

6305-6314 PB L 73494 Neutral-dyeing acid wool dyes. By Fischer and others. May 25, 1937. In German. 1.50

6315-6326 PB L 73494 Dyes dyeing at temperatures below the boiling point. By Fischer and Gmelin. May 28, 1937. In German. 1.50

6327-6330 PB L 73494 Dyes from 1- (sulfoalkylphenyl) - 5-pyrazolones. By Fischer. May 22, 1937. In German. 1.50

6331-6335 PB L 73494 Wool and lake dyes with the use of aminobenzotrifluorides as diazo components. By Henke and Fischer. May 24, 1937. In German. 1.50

6336-6338 PB L 73494 Nitro dyes on wool. By Fischer and Lang. May 24, 1937. In German. 1.50

6339-6340 PB L 73494 Aminotriphenylbenzene as diazo component in wool and cotton dyes. By Fischer and Lang. May 24, 1937. In German. 1.50

Dyes (contd)

6341-6344 PB L 73494 — 1-(2'-sulfo-6' - sulfamino-phenyl)-5-pyrazolones as coupling components for wool dyes. By Fischer and Lang. In German. 1.50

6345-6348 PB L 73494 — 3-Methyl-5-pyrazolone-1-carboxylic amide and dyes made therefrom. By Risse. May 24, 1937. In German. 1.50

6349-6350 PB L 73494 — Azo dyes from 2-hydroxystyrene. By H. Boedecker. May 24, 1937. In German. 1.50

6351-6354 PB L 73494 — Azo pigments from acetylacetone and benzoylacetone. By Funke and Elbs. May 24, 1937. In German. 1.50

6355-6356 PB L 73494 — Pigment dyes from 3-amino-4-methoxytrifluoromethylsulfone. By Funke. May 24, 1937. In German. 1.50

6357-6359 PB L 73494 — Shade and fine structure of the disazo dyes 2,5-dichloraniline Naphthol AS-G. By Funke and Schmieder. May 24, 1937. In German. 1.50

6360-6364 PB L 73494 — Pigments of the Hansagelb (Hansa Yellow) series. By Fischer and others. May 26, 1937. In German. 1.50

6365-6367 PB L 73494 — Adsorption of nitrogen by dye powders as an aid in the determination of fineness. By F. Schmieder and Funke. May 24, 1937. In German. 1.50

6368-6375 PB L 73494 — Leather dyes with aminobenzylsulfonic acids as starting components. By Huss. May 21, 1937. In German. 1.50

6376-6380 PB L 73494 — Leather dyes. By Fischer and Gmelin. May 26, 1937. In German. 1.50

6381-6384 PB L 73494 — Black superficial and penetrating - leather dyes. By Fischer and Gmelin. May 26, 1937. In German. 1.50

6385-6388 PB L 73494 — Secondary disazo dyes with m-aminobenzyl ethers in middle position. By Huss. May 24, 1937. In German. 1.50

6389-6403 PB L 73494 — Cotton dyes from trifluoro-methyl-aniline-sulfonic acids. By Huss. May 25, 1937. In German. 1.50

6404-6413 PB L 73494 — Dyes with quaternary groups. By Fischer and Gmelin. May 26, 1937. In German. 1.50

6414-6416 PB L 73494 — Bispyrazolones as coupling components for cotton dyes. By Fischer. May 28, 1937. In German. 1.50

6417-6424 PB L 73494 — Water soluble acetate rayon dyes. By Fischer. May 22, 1937. In German. 1.50

6425-6426 PB L 73494 — Various experiments. By Fischer and Henke. May 25, 1937. In German. 1.50

6427-6433 PB L 73494 — Experiments on fulling dyes (Azo dyes). By Fischer. Nov 23, 1937. In German. 1.50

6434-6437 PB L 73494 — Various experiments. By Fischer and others. Nov 22, 1937. In German. 1.50

6438-6442 PB L 73494 — Dyestuffs dyeing at low temperatures - 3rd part. By Fischer and Gmelin. Nov 24, 1937. In German. 1.50

6443-6448 PB L 73494 — Neutral-dyeing acid wool dyes. By Henke and Gmelin. Nov 25, 1937. In German. 1.50

6449-6460 PB L 73494 — Dyes of the type of Siriuslichtrot (Sirius Light Red) 5 B. By Huss. Nov 22, 1937. In German. 1.50

6461-6464 PB L 73494 — Some pyrazolone pigments. By Funke and Elbs. Nov 11, 1937. In German. 1.50

6465-6473 PB L 73494 — Experiments in the Hansagelb (Hansa Yellow) group. By Funke and Sieglitz. Nov 23, 1937. In German. 1.50

6474-6476 PB L 73494 — Experiments on transparent Hansagelb (Hansa Yellow). By Funke. Nov 11, 1937. In German. 1.50

6477-6481 PB L 73494 — Process for the concentration of dye pastes. By Funke and Hardt. n.d. In German. 1.50

6482-6484 PB L 73494 — The use of aminobenzotrifluorides for the synthesis of acetate rayon dyes. By Heyna. Nov 11, 1937. In German. 1.50

6485-6486 PB L 73494 — Water-soluble acetate rayon dyes. By Fischer and Siebert. Nov 22, 1937. In German. 1.50

6487-6489 PB L 73494 — Black leather dyes. By Fischer and Gmelin. Nov 18, 1937. In German. 1.50

6490-6502 PB L 73494 — Metal complex compounds of monoazo dyes from sulfoalkyl-Y-acids coupled in an alkaline medium. By Huss. Nov 16, 1937. In German. 1.50

6503-6504 PB L 73494 — Cotton dyes. By Fischer. Nov 22, 1937. In German. 1.50

6505-6510 PB L 73494 — Dyes with quaternary groups (2nd part). By Fischer and Gmelin. Nov 18, 1937. In German. 1.50

6511-6528 PB L 73494 — Some oxazole-, thiazole and imidazole derivatives of naphtholsulfonic acids. By Sedlmayer and others. Dec 2, 1937. In German. 1.50

6529-6530 PB L 73494 — Lake and disazo dyes. By Fischer and Henke. Nov 24, 1937. In German. 1.50

6531-6536 PB L 73494 — Dyes with "Carbolan" properties. By Fischer and others. Sep 9, 1938. In German. 1.50

6537-6542 PB L 73494 — Neutral-dyeing dyes. By Fischer and Gmelin. Sep 9, 1938. In German. 1.50

6543-6546 PB L 73494 — Various aminosulfones as diazo components in wool dyes. By Fischer and Henke. Sep 12, 1938. 1.50

6547-6550 PB L 73494 — Acid wool dyes from pyrazolones with a CF_3-group in 3-position. By Kracker and Schmid. Sep 13, 1938. In German. 1.50

6551-6553 PB L 73494 — Acid wool dyes from Echtbraun-V-Base (Fast Brown -V-Base). By Kracker and Schmid. Sep 12, 1938. In German. 1.50

6554-6558 PB L 73494 — 7-Aminocumarans as bases for chrome and Palatinecht (Palatine Fast) dyes. By Schmid. Sep 13, 1938. In German. 1.50

6559-6560 PB L 73494 — Acid wool dyes. By Fischer and Siebert. Sep 9, 1938. In German. 1.50

6561-6563 PB L 73494 — Azo dyes. By Fischer. Sep 12, 1938. In German. 1.50

6564-6565 PB L 73494 — Some cotton dyes. By Fischer and Siebert. Sep 6, 1938. In German. 1.50

6566-6569 PB L 73494 — Azo dyes from ditrifluoromethylated benzidines. By Heyna. Sep 5, 1938. In German. 1.50

6570-6578 PB L 73494 — Bispyrazolones from benzidines and 4, 4'-diaminostilbene-2,2'-disulfonic acids and dyes therefrom. By Fischer and Gmelin. Sep 10, 1938. In German. 1.50

6579-6583 PB L 73494 — Benzoechtkupferfarbstoffe (Benzo Fast copper Dyes) with aminophenyl-3-phenyl-5-pyrazolones as middle component. By Fischer and Siebert. Sep 10, 1938. In German. 1.50

6584-6585 PB L 73494 — Benzoechtkupferfarbstoffe. (Benzo Fast Copper Dyes). By Fischer and Siebert. Sep 10, 1938. In German. 1.50

6586-6591 PB L 73494 Metal complex compounds of monoazo dyes from o-aminophenols and sulfoalkyl- γ-acid derivatives coupled in an alkaline medium as well as γ-acid coupled in an alkaline medium. By Huss. Sep 6, 1938. In German. 1.50

6592-6597 PB L 73494 Black leather dyes. By Huss and others. Sep 5, 1938. In German. 1.50

6598-6601 PB L 73494 Some leather dyes with the starting-component used for Igenalbraun IGG (Igenal Brown). By Huss and others. Sep 7, 1938. In German. 1.50

6602-6609 PB L 73494 Heliorot (Helio Red) BL (o-toluidine Azuric acid calcium lake). A new laking process. By Ritze. Sep 8, 1938. In German. 1.50

6610-6612 PB L 73494 Preservation of pastes of pigment dyes. By Funke. Sep 6, 1938. In German. 1.50

6613-6614 PB L 73494 Influence of F-acid on coupling of p-nitraniline with β-naphthol. By Karl Beck. Sep 13, 1938. In German. 1.50

6615-6617 PB L 73494 Pigment dyes from amino-sulfonamides. By Huber. Sep 12, 1938. In German. 1.50

6618-6637 PB L 73494 Production and preparation of dyes for spin-dyeing. By Funke and Patar. Sep 30, 1938. In German. 1.50

6638-6642 PB L 73494 Some precipitable azo dyes. By Funke and Elbs. Sep 14, 1938. In German. 1.50

6643-6652 PB L 73494 Colorless self-coupling dyes. By Sedlmayr. Sep 15, 1938. In German. 1.50

6653-6655 PB L 73494 Chrome and copper-containing lake dyes. By Fischer and Siebert. Sep 10, 1938. In German. 1.50

6656-6658 PB L 73494 Lake dyes. By Fischer and Siebert. Sep 6, 1938. In German. 1.50

6659-6662 PB L 73494 Zaponechtgelb (Zapon Fast Yellow). By Weigele. Sep 13, 1938. In German. 1.50

6663-6678 PB L 73494 Self-couplers on acetyl cellulose. By C. Müller. n.d. In German. 1.50

6679-6681 PB L 73494 Water-soluble acetate rayon dyes. By Fischer and Siebert. Sep 6, 1938. In German. 1.50

6682-6695 PB L 73494 Aminoazo dyes from aminonaphthols coupled in an acid medium as self coupler for mixed fabrics of wool and "Zellwolle" (Cellulose wool). By Fischer and others. Sep 7, 1938. In German. 1.50

6696-6708 PB L 73494 Aminoazo dyes of the J-acid series with external coupling position as self coupler for mixed fabrics. By Kracker and Schumacher. Sep 5, 1938. In German. 1.50

6709-6727 PB L 73494 Self-couplers for mixed fabrics of wool and Zellwolle (cellulose wool) with the use of aminonaphtholsulfonic acids as diazo component. By Huss. Sep 7, 1938. In German. 1.50

6728-6735 PB L 73494 Various self-couplers for mixed fabrics of wool and Zellwolle (cellulose wool). By Fischer and Huss. Sep 13, 1938. In German. 1.50

6736-6742 PB L 73494 Supranol dyes. By Steinhauer. Nov 10, 1938. In German. 1.50

6743-6750 PB L 73494 Bluish supranolbrillantrot (Supranol Brilliant Red) brands. By Schindhelm and others. Nov 10, 1936. In German. 1.50

6751-6754 PB L 73494 The introduction of the succinic acid radical into azo dyes. By Steinhauer. Nov 10, 1936. In German. 1.50

6755-6764 PB L 73494 New nitro dyes. By Ritter. Nov 10, 1936. In German. 1.50

6765-6770 PB L 73494 The production of brown azo dyes from arylenediaminesulfonic acids. By Steinhauer. Nov 10, 1936. In German. 1.50

6771-6774 PB L 73494 Chrome dyes. Nov 10, 1936. In German. 1.50

6775-6778 PB L 73494 Green cotton dyes. By Schultis. Nov 10, 1936. In German. 1.50

6779-6784 PB L 73494 Red cotton dyes fast to light. By Schindhelm. Nov 10, 1936. In German. 1.50

6785-6786 PB L 73494 Stilbeneazo dyes fast to light. By Schultis. Nov 10, 1936. In German. 1.50

6787-6791 PB L 73494 Brown stilbene dyes fast to light. By Schindhelm. Nov 10, 1936. In German. 1.50

6792-6797 PB L 73494 Green-gray cotton dyes fast to light. By Schindhelm. Nov 10, 1936. In German. 1.50

6798-6802 PB L 73494 Acetate rayon dyes. By Kunze. Nov 10, 1936. In German. 1.50

6803-6807 PB L 73494 Water-soluble acetate rayon dyes. By Kunze. May 25, 1937. In German. 1.50

6808-6812 PB L 73494 Gray cotton dyes fast to light. By Schindhelm and Schultis. May 18, 1937. In German. 1.50

6813-6821 PB L 73494 Benzechtkupfer (Benzo Fast Copper) dyes. By Schindhelm. May 13, 1937. In German. 1.50

6822-6825 PB L 73494 Dyes from aminonaphthoic acids. By Schindhelm. May 14, 1937. In German. 1.50

6826-6828 PB L 73494 Azo dyes from triaminocyaphenine. By Steinhauer. Nov 10, 1936. In German. 1.50

6829-6832 PB L 73494 Bluish Supranolbrillantrots (Supranol Brilliant Reds). By E. Korten and others. May 18, 1937. In German. 1.50

6833-6846 PB L 73494 Aminonaphtholsulfonic acids and their derivatives and their use in the synthesis of azo dyes. By Steinhauer. May 26, 1937. In German. 1.50

6847-6851 PB L 73494 New nitro dyes. By Ritter. May 26, 1937. In German. 1.50

6852-6861 PB L 73494 The synthesis of neutral-dyeing fast wool dyes. By Steinhauer and others. Nov 25, 1937. In German. 1.50

6862-6865 PB L 73494 Dyes from derivatives of o-cyclohexyl-aniline. By Schultis. Nov 10, 1937. In German. 1.50

6866-6870 PB L 73494 Supramine and Anthralene dyes. By Steinhauer. Nov 12, 1937. In German. 1.50

6871-6875 PB L 73494 Wool dyes from new Tribases. By Schindhelm and A. Mueller. Nov 8, 1937. In German. 1.50

6876-6881 PB L 73494 The constitution of sulfonic acids of 1-amino-7-naphthols. By Steinhauer and A. Mueller. Nov 10, 1937. In German. 1.50

6882-6889 PB L 73494 Gray and blue chrome dyes. By Fleischhauer and A. Mueller. Nov 12, 1937. In German. 1.50

6890-6897 PB L 73494 Cotton dyes with triazole rings. By Schindhelm and Schultis. Nov 10, 1937. In German. 1.50

6898-6903 PB L 73494 Brown Nitro dyes of the azine series. By Fleischhauer. Sep 15, 1938. In German. 1.50

6904-6908 PB L 73494 Acetate rayon dyes. By Fenhich. Sep 15, 1938. In German. 1.50

6909-6929 PB L 73494 — The synthesis of neutral-dyeing fast wool dyes. By Korten and others. Sep 16, 1938. In German. 1.50

6930-6933 PB L 73494 — The use of new arylamino-naphtholsulfonic acids for the synthesis of azo dyes. By Fleischhauer and Adolf Mueller. Sep 15, 1938. In German. 1.50

6934-6940 PB L 73494 — Gray chrome dyes. By Fleischhauer and Adolf Mueller. Sep 15, 1938. In German. 1.50

6941-6949 PB L 73494 — Cotton dyes fast to boiling. By Schindhelm and Schultis. Sep 7, 1938. In German. 1.50

6950-6952 PB L 73494 — On the use of 1-amino-3-naphthol-7-sulfonic acid for the synthesis of cotton dyes. By Schindhelm. Sep 7, 1938. In German. 1.50

6953-6959 PB L 73494 — Stilbene dyes with triazole rings. By Schindhelm. Sep 7, 1938. In German. 1.50

6960-6965 PB L 73494 — Brown condensation products of the stilbene series. By Schultis and Schindhelm. Sep 13, 1938. In German. 1.50

PB L 73494 S. I.G. FARBENINDUSTRIE A.G. Reports on dyes and dye intermediates. (FIAT Microfilm Reel C 6, Frames 5564-6965, abstract cards). 1934-1938 344p
Price: Microfilm $7.00 - Photostat $23.00
These are abstracts of the items on microfilm reel C 6, (PB 73494) described above. They were prepared by FIAT abstractors in Germany.

PB L 70342. I.G. FARBENINDUSTRIE A.G., Reports on dyes and dye intermediates. (FIAT Microfilm Reel C-13, Frames 14236-15187) (See also FIAT Microfilm Reel C-14, PB 70343). 1934 - 1942. 951 f. Price: Microfilm-$6.00 - Enlargement Print-$95.50.
This FIAT microfilm reel contains 119 reports on research in the field of dyes and dye intermediates. Individual reports, listed below, are available as enlargement prints. Please give PB and frame numbers when ordering an individual item. These reports are all in German.

Frames	Title	Price
14236 - 14245 PB L 70342	Research in the "Indanthren-Olivgrün" - series. By Rudolf. Dec 13, 1938. In German.	$1.50
14246 - 14258 PB L 70342	Bz 1 - Bz 3 - diaza-benzanthrone-carboxylic acids and their acylamines. By Berthol and others. Dec 1, 1938. In German.	1.50
14259 - 14265 PB L 70342	Vat dyes composed of 2,3 dichloro-1,4 - naphthoquinone. By Maurach. Nov 15, 1938. In German.	1.50
14266 - 14274 PB L 70342	Information on coronene. By Robl. Nov 25, 1938. In German.	1.50
14275 - 14283 PB L 70342	Anthraquinone dyes containing quaternary ammonium groups. By Krause and Schenzler. Dec 9, 1938. In German.	1.50
14284 - 14290 PB L 70342	Verification of B.P.460440 and patent addition 489172 (Brit. Celanese Ltd.) concerning production of dyes for acetate rayon. By Krause and Schenzler. Dec 7, 1938. In German.	1.50
14291 - 14312 PB L 70342	Organic body colors. By V. Susich. Dec 12, 1938. In German.	2.50
14313 - 14350 PB L 70342	The various polymorphic modifications of "Indanthrenblau RS". By V. Susich. Nov 18, 1938. In German.	4.00
14351 - 14360 PB L 70342	Bromination of benzanthrone. By Köberle. Dec 10, 1938. In German.	1.50
14361 - 14373 PB L 70342	Conversion of ∝-aminoanthraquinones to Bz1-Bz3-diazabenzanthrones by means of ammonia and aldehydes. By Berthold and Rohland. Nov 23, 1938. In German.	1.50
14374 - 14379 PB L 70342	Bz1-Bz3-diazabenzanthraquinones. By Berthold and others. Dec 1, 1938. In German.	1.50
14380 - 14382 PB L 70342	Drying of 2,3-dichloro-1, 4-naphthoquinone. By Jul. Muller. Nov 11, 1938. In German.	1.50
14383 - 14386 PB L 70342	Syntheses with butane-tetracarboxylic acid. By Hopff. Dec 6, 1938. In German.	1.50
14387 - 14394 PB L 70342	Action of the alkali metal ion during aluminum chloride-alkali chloride fusion. By Braun. Nov 22, 1938. In German.	1.50
14395 - 14410 PB L 70342	Vat dyes from 1,5-diamino-2-hydroxyanthraquinone. By Schlichting and Stephan. Jun 8, 1939. In German.	2.00
14411 - 14417 PB L 70342	"Indanthrengelb 6 GD". By Bruck. Jun 6, 1939. In German.	1.50
14418 - 14421 PB L 70342	Acylamines of indanthrone-3,3'-dicarboxylic acid. By Berthold and Benedict. Jun 5, 1939. In German.	1.50
14422 - 14426 PB L 70342	Production of polynuclear azine compounds. By Eichholz. Jun 5, 1939. In German.	1.50
14427 - 14457 PB L 70342	Bz. 2-methyl- and Bz. 2-ethyl-benzanthrones and derivative dyes. By Schlichting and Hrubesch. Jun 9, 1939. In German.	3.50
14458 - 14462 PB L 70342	Ketone syntheses by means of iron and iron compounds. By W. Bruck. Jun 6, 1939. In German.	1.50
14463 - 14470 PB L 70342	Metal complexes of compounds capable of being converted to vat dyes. By Vilsmeier. Jun 9, 1939. In German.	1.50
14471 - 14482 PB L 70342	Research in the series of "Cellitonechtblaugrün B". By Krause and others. Jun 8, 1939. In German.	1.50
14483 - 14486 PB L 70342	Water-soluble dyes for rayon from "Leucotetrahydroquinizarine". By Krause, and Schenzler. Jun 7, 1939. In German.	1.50
14487 - 14502 PB L 70342	Reactions of anthraquinone derivatives with butyrolactone and pyrrolidones. By Schlichting and Klager. Jun 7, 1939. In German.	2.00
14503 - 14511 PB L 70342	Fluorescence dyes of the anthrapyrimidine series. By Schlichting and Stephan. Jun 9, 1939. In German.	1.50
14512 - 14516 PB L 70342	Action of nitrohydrocarbons on aminoanthraquinones in the presence of caustic potash. By Bruck. Jun 7, 1939. In German.	1.50

14517 - 14525 PB L 70342 — Boiling of diazo-anthraquinones with formaldehyde. By Berthold and others. Jun 5, 1939. In German. 1.50

14526 - 14533 PB L 70342 — Benzanthrone syntheses from esters of "leucoanthraquinones". By Schlichting and Hrubesch. Jun 7, 1939. In German. 1.50

13434- 14543 PB L 70342 — Separation of the technical dichlorophthalic acid mixture (into the isomers). By J. Müller and others. May 12, 1939. In German. 1.50

14544 - 14552 PB L 70342 — Acetate rayon and vat dyes from hydroxyanthraquinone ethers. By K. Müller. Jun 12, 1939. In German. 1.50

14553 - 14561 PB L 70342 — Alloy catalysts (Production and Use). By Arndt. Jun 12, 1939. In German. 1.50

14562 - 14565 PB L 70342 — Chlorination of violanthrene in molten phthalic acid anhydride. By E. Krauch. Jan 19, 1940. In German. 1.50

14566 - 14570 PB L 70342 — Dischargeable vat dyes of the Indanthrene Brilliant Green series. By E. Krauch. Jan 19, 1940. In German. 1.50

14571 - 14575 PB L 70342 — Water-soluble esters from 8,8'-dihydroxy-1,2-2',1' -dinaphthazines. By Bruck. Jan 26, 1940. In German. 1.50

14576 - 14580 PB L 70342 — Chlorination of phthalic acid in an aqueous solution. J. Müller. Jan 29, 1940. In German. 1.50

14581 - 14584 PB L 70342 — Action of formaldehyde on "Leuco-2-hydroxy-anthraquinone". By J. Müller. Jan 17, 1940. In German. 1.50

14585 - 14610 PB L 70342 — Mixture of alizarins and sodium hydroxide solution. By Binkele and Susich. Jan 22, 1940. In German. 1.50

14611 - 14613 PB L 70342 — Benzanthrone synthesis. By Robl. Feb 12, 1940. In German. 1.50

14614 - 14620 PB L 70342 — Production of carboxylic acid in the alkali-aluminumchloride melt. By W. Braun. Jan 29, 1940. In German. 1.50

14621 - 14629 PB L 70342 — Halogenized phthalic acid anhydrides as vat dye components. By J. Müller. Mar 13, 1941. In German. 1.50

14630 - 14640 PB L 70342 — Blue vat dye of 1-amino-anthraquinone-2-aldehyde and barbituric acid. By Schlichting and Klager. Feb 18, 1941. In German. 1.50

14641 - 14646 PB L 70342 — 1-amino-2-anthraquinonyl-anthraquinone-1-imidazoles. By Rohland. Apr 10, 1941. In German. 1.50

14647 - 14651 PB L 70342 — 8-Acylamino-1(N),2- α-pyridone-anthraquinones. By Ehrhardt. Mar 12, 1941. In German. 1.50

14652 - 14656 PB L 70342 — 4-Hydroxyanthraquinone-1(N),2-benzo-acridones. By W. Bruck. Apr 8, 1941. In German. 1.50

14657 - 14664 PB L 70342 — New ethers of Bz2,Bz2'-dihydroxy-dibenzanthrone. By Neresheimer. Apr 22, 1941. In German. 1.50

14665 - 14681 PB L 70342 — Recent research on "Indanthrenoliv" T and "Indanthrengrau" M. By Braun. Mar 20, 1941. In German. 1.50

14682 - 14687 PB L 70342 — Ethers of Bz2,Bz2'-dihydroxydibenzanthrone with diols. By A. Ehrhardt. Mar 19, 1941. In German. 1.50

14688 - 14691 PB L 70342 — Reaction of 2-hydroxyanthraquinone with 2-naphthol. By Bruck. Apr 15, 1941. In German. 1.50

14692 - 14698 PB L 70342 — Vat dyes with 7 rings. By Böttcher. Mar 15, 1941. In German. 1.50

14699 - 14710 PB L 70342 — Acid wool dyes of the anthrapyridine series. By Schlichting. Mar 6, 1941. In German. 1.50

14711 - 14718 PB L 70342 — Complex azo dyes of the 8-amino-quinoline series. By Vilsmeier. Feb 19, 1941. In German. 1.50

14719 - 14728 PB L 70342 — Dyes for "Perlon" silk. By E. Krauch and Boettcher. Apr 8, 1941. In German. 1.50

14729 - 14736 PB L 70342 — Vat dyes from 6-chloro- and 6,7-dichloroquindarine for rayon and "Perlon" silk. By Boettcher. Mar 14, 1941. In German. 1.50

14737 - 14756 PB L 70342 — Luminous dyes. By Schlichting. Mar 25, 1941. In German. 2.00

14757 - 14762 PB L 70342 — Blue pigment dye from 2-chloro-3-amino benzoic acid. By Schlichting and Klager. Feb 17, 1941. In German. 2.00

14763 - 14771 PB L 70342 — Yellow Pigment Dye from 4-amino acetophenone-o-carboxylic acid amide. By Schlichting and Klager. May 21, 1941. In German. 1.50

14772 - 14793 PB L 70342 — Research in the "Lumogen-L"field. By Robl and others. Apr 18, 1941. In German. 2.50

14794 - 14798 PB L 70342 — Terephthalic aldehyde. By Robl and Reich. Mar 21, 1941. In German. 1.50

14799 - 14817 PB L 70342 — Nitriles and imides of ortho-dicarboxylic acids. By Braun. Apr 1, 1941. In German. 2.00

14818 - 14829 PB L 70342 — 4,5-Dichlorophthalic acid. By Jul. Mueller. Feb 24, 1941. In German. 1.50

14830 - 14839 PB L 70342 — Reactions of the 5'-Nitro-2',4'-dichloro-2-benzoylbenzoic acids. By Funcke. Mar 28, 1941. In German. 1.50

14840 - 14843 PB L 70342 — Reactions with alkylsulfonic esters and -amides. By Rohland. Mar 27, 1941. In German. 1.50

14844 - 14849 PB L 70342 — Vat dyes of the anthraquinone series from pyridine-2,5,-dicarboxylic acid. By Schlichting. Apr 30, 1942. In German. 1.50

14850 - 14856 PB L 70342 — 1,5-diphenyltetrazolecarboxylic acids as dye components and action of hydrazoic acid on anthraquinone. By Schlichting and Klager. Apr 24, 1942. In German. 1.50

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14857 - 14862 PB L 70342 — Anthrasols of the anthraquinone acridone series. By Schlichting and Klager. Apr 24, 1942. In German. 1.50

14863 - 14867 PB L 70342 — Anthrimides and carbazoles of the anthraquinone-benzol acridone series. By W. Bruck. Apr 15, 1942. In German. 1.50

14868 - 14876 PB L 70342 — Bromine substitution products of indanthrene red FBB. By Jul. Mueller. Apr 16, 1942. In German. 1.50

14877 - 14884 PB L 70342 — Production of "Indanthrene Blau" CLB and "Indanthren Rot" FBB without the use of chromic acid. By Rohland. Apr 15, 1942. In German. 1.50

14885 - 14889 PB L 70342 — Dyes from 6,7-Phthaloylbenzanthrone. By Schlichting and Klager. Arp 24, 1942. In German. 1.50

14890 - 14893 PB L 70342 — New chlorinated pyranthrones. By F. Puncke. Apr 24, 1942. In German. 1.50

14894 - 14905 PB L 70342 — Navy blue vat dyes of the dibenzanthrone and isodibenzanthrone series. By Braun. Apr 30, 1942. In German. 1.50

14906 - 14912 PB L 70342 — Isodibenzanthrone dyes with various substitutes in Bz 2 - and Bz 2 ' - position. By Schlichting and Brubesch. Apr 28, 1942. In German. 1.50

14913 - 14916 PB L 70342 — Blue and green dyes similar to "Neocoton". By A. Ehrhardt. Apr 24, 1942. In German. 1.50

14917 - 14919 PB L 70342 — Constitution of "Cibanongelb-braun G". By Robl. Apr 20, 1942. In German. 1.50

14920 - 14923 PB L 70342 — "Anthrasolgrau" dyes. By Bertl. May 9, 1942. In German. 1.50

14924 - 14939 PB L 70342 — Bromination of phthalic acid in aqueous solution. By Jul. Mueller. Dec 1, 1941. In German. 2.00

14940- 14943 PB L 70342 — Nitration of 4,5-dichlorophthalic acid anhydride. By Robl. Apr 30, 1942. In German. 1.50

14944 - 14949 PB L 70342 — New dyes of the "Acedianthron" series. By Scheyer and Schwamberger. Nov 5, 1934. In German. 1.50

14950 - 14956 PB L 70342 — Anthraquinone quinolines. By Ritter. Nov 1, 1934. In German. 1.50

14957 - 14962 PB L 70342 — Anthraquinone vat dyes with several thiazole rings. By Kunze. Nov 2, 1934. In German. 1.50

14963 - 14968 PB L 70342 — Sulfur-containing dyes of the anthanthrone series. By Kunze. Nov 2, 1934. In German. 1.50

14969 - 14973 PB L 70342 — Indigo dyes from 4-ethyl-6-halogen-3-hydroxy thionaphthenes. By Steiger and Riedmair. Nov 6, 1934. In German. 1.50

14974 - 14978 PB L 70342 — Vat Dyes from 4-methyl-5-chloro-5-methoxy-3-hydroxy thionaphthene. By Steiger. Nov 2, 1934. In German. 1.50

14979 - 14984 PB L 70342 — Dye syntheses with methylene-anthrone. By Scheyer. Mar 26, 1935. In German. 1.50

14985 - 14989 PB L 70342 — Dyes of the indanthrene-olive green Series. By Honold and R. Müller. Mar 26, 1935. In German. 1.50

14990 - 14996 PB L 70342 — New Acylamino-anthraquinone dyes. By Kunze. Mar 21, 1935. In German. 1.50

14997 - 15000 PB L 70342 — Dyes from 5,7-dimethyl-6-chloro-hydroxythionaphthene. By Brunner. Mar 25, 1935. In German. 1.50

15001 - 15006 PBL 70342 — Indigo dyes from amino-saligenin - methylene ether. By Riedmair. Mar 25, 1935. In German. 1.50

15007 - 15012 PB L 70342 — Dyes of the "Hydron- Blau" series. By Hechtenberg. Mar 27, 1935. In German. 1.50

15013 - 15025 PB L 70342 — New anthrimide synthesis. By Scheyer and Schwamberger. Oct 25, 1935. In German. 1.50

15026 - 15031 PB L 70342 — Dyes of the "Indanthrenolivgrün"-Reihe series. By Honold. Oct 25, 1935. In German. 1.50

15032 - 15038 PB L 70342 — Alkoxy-anthanthrones. By Kunze. Oct 25, 1935. In German. 1.50

15039 - 15047 PB L 70342 — Di-pyrazolesanthrone- and anthraquinone-di-indazole dyes. By Cofferje. Oct 25, 1935. In German. 1.50

15048- 15053 PB L 70342 — Azo dyes of the anthraquinone series. By Fleischhauer and Honold. Oct 25, 1935. In German. 1.50

15054 - 15059 PB L 70342 — Thioindigo dyes of the indan series. By Riedmair. Oct 25, 1935. In German. 1.50

15060 - 15065 PB L 70342 — Fluorine-containing thioindigo dyes. By Riedmair. Oct 25, 1935. In German. 1.50

15066 - 15069 PB L 70342 — Verification of Ciba Swiss patents 176363, 178121, 178122 and 177942 for production of indigo dyes. By Troesken. Oct 25, 1935. In German. 1.50

15070 - 15073 PB L 70342 — New syntheses of anthanthrone derivatives. By Scheyer. Mar 10, 1936. In German. 1.50

15074 - 15077 PB L 70342 — Anthraquinone acridones. By Ritter. Mar 10, 1936. In German. 1.50

15078 - 15080 PB L 70342 — Azo dyes of the anthraquinone series. By Honold. Mar 5, 1936. In German. 1.50

15081 - 15085 PB L 70342 — Indigo dyes from 4-hydroxy-naphthostyrils. By Brunner. Mar 5, 1936. In German. 1.50

15086 - 15090 PB L 70342 — Thio-indigo dyes of the quinoline series. By Riedmair. Mar 5, 1936. In German. 1.50

15091 - 15095 PB L 70342 — Thioindigo dyes from 4-amino-pyrocatechol dialkyl ethers. By Riedmair. Mar 5, 1936. In German. 1.50

15096 - 15098 PB L 70342 — Production of "Hydrogengelb G". By Tappermann. Mar 5, 1936. In German. 1.50

Dyes (contd)

15099 - 15105 PB L 70342 — Reactions with Anthraquinone-1,2-(N)-thiazole. By Schmamberger. Sep 30, 1936. In German. 1.50

15106 - 15110 PB L 70342 — Dye syntheses with methylene anthrone. By Scheyer and Riedmair. Sep 30, 1936. In German. 1.50

15111 - 15115 PB L 70342 — Dye syntheses with methylene anthrone. By Riedmair. Sep 30, 1936. In German. 1.50

15116 - 15120 PB L 70342 — Production of substituted benzanthrones. By Scheyer. Sep 29, 1936. In German. 1.50

15121 - 15131 PB L 70342 — Mono- and dioxazines. By Ritter and Schubert. Sep 30, 1936. In German. 1.50

15132 - 15141A PB L 70342 — Acylamino-anthraquinones with azo-aryl-carboxylic acids. By Honold and Schubert. May 1, 1937. In German. 1.50

15142 - 15143 PB L 70342 — Red vat dye from 1-aminoanthraquinone-2-carboxylic acid. By Scheyer. Mar 5, 1937. In German. 1.50

15144 - 15148 PB L 70342 — Bal-Bromo-benzanthrone dyes. By Scheyer and Riedmair. Mar 10, 1937. In German. 1.50

15149 - 15151 PB L 70342 — Di-pyrazoleanthrone dyes. By Gofferjé. Mar 1, 1937. In German. 1.50

15152 - 15156 PB L 70342 — Acetate rayon dyes of the anthraquinone series. By Heinrich. Mar 12, 1937. In German. 1.50

15157 - 15167 PB L 70342 — Thioindigo dyes of the azaphenanthrene series. By Steiger. Mar 1, 1937. In German. 1.50

15168 - 15174 PB L 70342 — Acylamino-anthraquinone dyes. By Riedmair. Dec 3, 1937. In German. 1.50

15175 - 15178 PB L 70342 — Acylamino anthraquinone dyes from heterocyclic carboxylic acids. By Kunze. Nov 1, 1937. In German. 1.50

15179 - 15181 PB L 70342 — Acedianthrone dyes. By Scheyer. Nov 30, 1937. In German. 1.50

15182 - 15187 PB L 70342 — Technical production of 2,7-dimethoxy-anthranthrone. By Kunze. Nov 1, 1937. In German. 1.50

PB L 70342-S. I.G. FARBENINDUSTRIE A.G., Reports on dyes and dye intermediates. (FIAT Microfilm Reel C 13, Frames 14236-15187, abstract cards). 1934-1942. 121 p. Price: Microfilm-$3.00 - Photostat-$9.00
These are short abstracts of the items on Reel C13(PB 70342), described above. They were prepared by FIAT abstracters in Germany. In English.

PB L 73919. GERMANY. I.G. FARBENINDUSTRIE A.G., LEVERKUSEN, Washing agents, textile auxiliaries and dyes. (FIAT Microfilm Reel N 99, Frames 1376-2482) 1929-1945. 1106 f. Price: Microfilm-$6.00 - Enlargement Printout-$111.00
The 240 activities reports contained in this reel describe experiments made with washing agents, textile auxiliaries, and dyes in the years 1929-1942 (one report is dated 1945). Particular experiments deal with the preparation of a suitable substitute for oleic acid, methods for testing hydrophobic properties of textiles, and the preparation of rapid wetting agents by sulfonation of aliphatic, saturated ketones of higher molecular weight. Other reports deal with the preparation of Larepon, the preparation of emulsifiers for the emulsion polymerization of butadiene, levelling agents for vat dyes coupling components for azo dyes (experiments to increase the fastness to light and to washing), the formation of asymetric ureas for the linkage of azo dyes with each other and with other dyes, reserving agents for wool and tanning preparations. Individual items are listed below and will be available as enlargement prints only. The entire reel may be purchased in microfilm form for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1376-1377 PB L 73919	Effectiveness of the condensation products. In German. Part of a progress report.	$1.50
1378-1379 PB L 73919	Use of talloil instead of oleic acid in the preparation of the Medialan series and Igepon. 1936. In German.	1.50
1379-1380 PB L 73919	Agent for the even dyeing of the new vat-dye Le 22%. 1936. In German.	1.50
1380-1385 PB L 73919	Research on current products. 1936. In German.	1.50
1386-1387 PB L 73919	Taurine of high-molecular weight as a textile aid. 1936. In German.	1.50
1387-1388 PB L 73919	Talloil as a cheap substitute for oleic acid in the preparation of Medials and Igepon. 1936. In German.	1.50
1388-1390 PB L 73919	Miscellaneous. 1936. In German.	1.50
1391-1397 PB L 73919	Experimental portion for frames 1386-1387. 1936. In German.	1.50
1397-1399 PB L 73919	Experimental portion for frames 1387-1388. 1936. In German.	1.50
1400 PB L 73919	Experimental portion for frames 1388-1390. 1936. In German.	1.50
1401-1403 PB L 73919	Oleic acid substitute for "Medialan A" using chlorinated stearic acid. 1937. In German.	1.50
1403-1404 PB L 73919	Preparation of the free acid from the fatty acid sarcosides (Medialan acid). 1937. In German.	1.50
1404-1406 PB L 73919	Experimental portion for frames 1401-1403. 1937. In German.	1.50
1406-1407 PB L 73919	Experimental portion for frames 1403-1404. 1937. In German.	1.50
1408-1412 PB L 73919	Effect of alkali on chlorinated paraffin according to A.P. 2 146 090. 1937. In German.	1.50
1412-1414 PB L 73919	Other matters. 1937. In German.	1.50
1414-1417 PB L 73919	Experimental portion for frames 1408-1412. 1937. In German.	1.50
1417-1419 PB L 73919	Experimental portion for frames 1412-1414. 1937. In German.	1.50
1420-1421 PB L 73919	Method for testing of hydrophobic substances. 1937. In German.	1.50
1422-1426 PB L 73919	Experimental portion for frames 1420-1421. 1937. In German.	1.50

1427-1430 PB L 73919 — Animalizing of cuprammonium rayon and viscose by spinning with polyamides with higher aliphatic bases. 1936. In German. 1.50

1431-1449 PB L 73919 — Research on the preparation of "Lanepon-like" products. 1937. In German. 1.50

1450-1454 PB L 73919 — Laboratory washing machine for research with small quantities of substances. 1937. In German. 1.50

1455-1456 PB L 73919 — Higher alkylated aminosulfonic acids from fatty aldehydes (fatty ketones). 1937. In German. 1.50

1457 PB L 73919 — Wetting agent Le/HS 235. 1937. In German. 1.50

1458 PB L 73919 — Research concerning example 1 of patent application H 141 686 (Hasse). 1937. In German. 1.50

1458-1459 PB L 73919 — N-alkyl-ethanolamine for the "Ranidogen-neutral developing." 1937. In German. 1.50

1459-1460 PB L 73919 — Research on obtaining capillary-active substances from butadiene oil. 1937. In German. 1.50

1461 PB L 73919 — Sulfonates from hydrogenated benzyl phenols. By Schröter. 1937. In German. 1.50

1461-1462 PB L 73919 — Other matters. 1937. In German. 1.50

1463 PB L 73919 — Preparation B 4, 17, and 20; B 55, 56, 57, 84, and 102 (letter from Dr. Keppler). 1937. In German. 1.50

1464-1468 PB L 73919 — On the preparation and tests of three taurines. 1937. In German. 1.50

1469-1471 PB L 73919 — Sulfonation of saturated aliphatic ketones of high-molecular weight. 1938. In German. 1.50

1471 PB L 73919 — Other matters. In German. 1.50

1472-1475 PB L 73919 — Preparation of "Lanepon"-like products. 1938. In German. 1.50
Continuation of report dated Sep 29, 1937, frames 1431-1449.

1476-1479 PB L 73919 — "Lanepon"-like product I (based on totally-hydrolyzed protein). 1938. In German. 1.50

1480-1482 PB L 73919 — "Lanepon"-like product II (based on a partly hydrolyzed substance, molecular weight 650-700). 1938. In German. 1.50

1483-1485 PB L 73919 — Modification of paraffin oxidation fatty acids. 1938. In German. 1.50

1486-1488 PB L 73919 — A new chlorination method in the presence of SO_2. 1939. In German. 1.50

1489-1497 PB L 73919 — Rapid wetting agents (according to the research of Dr. Ballauf, Dr. Keppler and Dr. Welles). 1939. In German. 1.50

1498-1499 PB L 73919 — Substitute for Albatex PO of Ciba (agent for even dyeing of vat dyes). 1939. In German. 1.50

1500-1502 PB L 73919 — 2,4-Diphenyl-6-hydroxy-1,3,5-triazine. 1929. In German. 1.50

1503-1504 PB L 73919 — Use of 8-amino-2-quinoline carboxylic acid in the production of metal-containing azo-dyes. 1929. In German. 1.50

1505 PB L 73919 — A new, blue, copper-containing azo dye from "Karbidin" (4,4'-diaminodiphenyl-3,3'-dicarboxylic acid) and "Chicago-blue"-disulfonic acid. 1929. In German. 1.50

1506-1507 PB L 73919 — A new substantive, color, copper-containing, o-carboxyazo dye. 1929. In German. 1.50

1508-1514 PB L 73919 — Yellow benzo fast copper dyes from 4,4'-diaminodiphenylurea-3,3'-dicarboxylic acid (urea dicarboxylic acid). 1929. In German. 1.50

1515-1528 PB L 73919 — "Variaminblue bases" which contain sulfo, sulfamide or similar groups ortho position to the imino groups. 1930. In German. 1.50

1529-1530 PB L 73919 — The metal-complex-forming properties of azo dyes with amino compounds such as diazotized components which contain a tertiary nitrogen atom which is ortho to the NH_2 group. 1930. In German. 1.50

1531-1533 PB L 73919 — Copper-containing azo dyes from benzidinedicarboxylic acid and aminonaphthol-disulfonic acids. 1930. In German. 1.50

1534-1539 PB L 73919 — Research on the determination of the extent of condensation of technical methyldichlorotriazine. 1930. In German. 1.50

1540 PB L 73919 — This is a brief table giving some properties of a few dyes based on benzidinedicarboxylic acid, 1,8-aminonaphthol disulfonic acids, H-acid, K-acid, and Columbia acid. n.d. In German. 1.50

1541-1560 PB L 73919 — Preparation of methyladichlorotriazine, higher alkyldichlorotriazines, hexahydrophenyldichlorotriazine, and benzyl dichlorotriazine. 1930. In German. 2.00

1561-1578 PB L 73919 — Replacement of the chlorine atom of 3-chloro-4-nitraniline and its substitution products. 1930. In German. 2.00

1579-1584 PB L 73919 — The preparation of methyl magnesium bromide in benzene-ether. 1930. In German. 1.50

1585-1592 PB L 73919 — Isocyanates from aminoazo benzene and its derivatives. 1930. In German. 1.50

1593-1601 PB L 73919 — Asymetric ureas. 1931. In German. 1.50

1602-1605 PB L 73919 — Selective dehydrogenation of alcohols. 1931. In German. 1.50

1606-1608 PB L 73919 — A new method for the preparation of sulfochlorides. 1932. In German. 1.50

1609-1610 PB L 73919 — The linking of water-soluble amino-anthraquinone dyes of the alizarin direct blue AS type with amino-azo dyes in order to prepare light-fast, green, substantive dyes. 1932. In German. 1.50

1611-1614 PB L 73919 — The preparation of isothiocyanate sulfonic acids and their use in the preparation of asymetric thioureas. 1932. In German. 1.50

1615-1628 PB L 73919 — Reserving agents for wool. 1929. In German. 1.50

1629-1642 PB L 73919 — Polysulfonamides as reserving agents. 1930. In German. 1.50

1643-1649 PB L 73919 — More information on polysulfonamides as reserving agents. 1930. In German. 1.50

1650-1662 PB L 73919 — Polysulfonamides as tanning materials. 1930. In German. 1.50

1663-1664 PB L 73919 — A new member of the Sirius light blue series. 1933. In German. 1.50

1665-1668 PB L 73919 — Progress report. By Dr. Huismann. Nov 9, 1934. In German. 1.50

1669-1672 PB L 73919 — Progress report. 1935. In German. 1.50

1673-1675 PB L 73919 — Progress report for Jan 1935. In German. 1.50

1676-1678 PB L 73919 — Progress report for Feb 1935. In German. 1.50

1679-1683 PB L 73919 — Progress report for Mar 1935. In German. 1.50

1684-1687 PB L 73919 — Progress report for Apr 1935. In German. 1.50

1688-1691 PB L 73919 — Progress report for May-Jun 1935. In German. 1.50

1692-1701 PB L 73919 — Progress report for Jul, Sep-Oct 1935. In German. 1.50

1702-1705 PB L 73919 — Progress report for Nov-Dec 1935. In German. 1.50

1706-1715 PB L 73919 — Progress report for Jan-Apr 1936. In German. 1.50

1716-1743 PB L 73919 — Progress report to Dec 1937. In German. 3.00

1744-1752 PB L 73919 — A new method for preparing sulfones. 1939. In German. 1.50

1753-1770 PB L 73919 — Progress report from Jan 1939 to May 1940. In German. 2.00

1771-1784 PB L 73919 — Progress report from May 1940 to Jun 1941. In German. 1.50

1785-1786 PB L 73919 — Progress report. 1941. In German. 1.50

1787-1788 PB L 73919 — Rubicene. 1929. In German. 1.50

1789-1791 PB L 73919 — A new synthesis for 1,2,5,6-dibenzophenazine. Patent application J..... 1929. In German. 1.50
This is 1,2,6,7 dibenzophenazine according to Chem. abstracts numbering scheme.

1792-1797 PB L 73919 — Preparation of 1,2,5,6-dibenzophenazine (1,2,6,7) and its derivatives. 1930. In German. 1.50

1798-1800 PB L 73919 — Acridonoylaminoanthraquinone. 1930. In German. 1.50

1801-1803 PB L 73919 — Vat dyeing of wool with sulfur dyes. 1931. In German. 1.50

1804-1806 PB L 73919 — Binaphthalene dioxide and sulfur dyes therefrom. 1931. In German. 1.50

1807 PB L 73919 — Research on the esterification of sulfur dyes. 1931. In German. 1.50

1808-1810 PB L 73919 — 4'-Amino-2-phenylanthraquinone and dyes therefrom. 1931. In German. 1.50
Legibility is poor.

1811-1816 PB L 73919 — 2-Phenylanthraquinones. 1931. In German. 1.50

1817-1818 PB L 73919 — Phthaloylfluoranthene. 1932. In German. 1.50

1819-1821 PB L 73919 — Phthaloylpyrene. 1932. In German. 1.50

1822-1823 PB L 73919 — "Vat-orange 3731e-Ie." 1932. In German. 1.50

1824-1826 PB L 73919 — Phthaloylfluoranthene. (Second report). 1932. In German. 1.50

1827-1830 PB L 73919 — Condensation products of the acenaphthene series of high-molecular weight. (Preliminary report) 1934. In German. 1.50

1831-1833 PB L 73919 — Vat-orange No. 132. 1934. In German. 1.50

1834-1839 PB L 73919 — 4,8-Dichloro-2-naphthylamine in condensed systems. Preparation of 4,8-dichloro-2-nitronaphthalene and 4,8-dichloro-2-naphthylamine. n.d. In German. 1.50

1840-1843 PB L 73919 — Report of Oct 10, 1934. By Kramer. In German. 1.50

1844-1850 PB L 73919 — Use of 4,8-dichloro-2-naphthylamine in the preparation of condensed ring systems. 1934. In German. 1.50

1851-1854 PB L 73919 — New method for preparing Vat-orange No. 132. 1934. In German. 1.50

1855-1856 PB L 73919 — Progress report dated Dec 11, 1934. By Kramer. In German. 1.50

1857-1859 PB L 73919 — Progress report for Jan 1935. In German. 1.50

1860-1862 PB L 73919 — Progress report for Feb 1935. In German. 1.50

1863-1870 PB L 73919 — Progress report for Mar-Apr 1935. In German. 1.50

1871-1877 PB L 73919 — Progress report for May-Jun 1935. In German. 1.50

1878 PB L 73919 — Progress report for Aug 1935. In German. 1.50

1879-1881 PB L 73919 — Progress report for Sep 1935. In German. 1.50

1882-1884 PB L 73919 — Progress report for Oct-Nov 1935. In German. 1.50

1885-1887 PB L 73919 — Progress report for Dec 1935. In German. 1.50

1888-1891 PB L 73919 — Vat dyes from anthraquinone-2,1(o)-1'-2'-(o)-xanthone-carboxylic acid and 1-phenoxyanthraquinone-4'-carboxylic acid. In German. 1.50

1892-1897 PB L 73919 — Progress report for Mar 1936. In German. 1.50

1898-1900 PB L 73919 — Progress report for Apr-Jun 1936. In German. 1.50

1901-1904 PB L 73919 — Progress report for Aug 1936. In German. 1.50

1905-1909 PB L 73919 — Progress report for Sep-Dec 1936. In German. 1.50

1910-1912 PB L 73919 — Research on the preparation of 1-phenylanthraquinone. 1937. In German. 1.50

1912-1913 PB L 73919 — Bromination of "Acrolid." 1937. In German. 1.50

1913-1914 PB L 73919 — Chlorination of "Acrolid." 1937. In German. 1.50

1914 PB L 73919 — Olive (khaki) and brown vat dyes. 1937. In German. 1.50

1914-1916 PB L 73919 — Dichloranthraquinonecarboxylic acid from 2-methylanthraquinone. 1937. In German. 1.50

1917-1918 PB L 73919 — Nitration of 1-chloranthraquinone-2-carboxylic acid. 1937. In German. 1.50

1918-1919 PB L 73919 — Dyes from 5-nitro and 8-nitro-1-chloranthraquinone-2-carboxylic acid. 1937. In German. 1.50

1919-1920 PB L 73919 — 5-Nitro and 8-amino-1-chloroanthraquinone-2-carboxylic acid. 1937. In German. 1.50

1920-1923 PB L 72919 — 1,5-Dichloranthraquinone-2-carboxylic acid and dyes therefrom. 1937. In German. 1.50

1924-1929 PB L 73919 — Progress report for May-Jun 1937. In German. 1.50

1930-1932 PB L 73919 — Preparation of 2-(3'-4'-dicarboxyphenyl)-4,6-dichydroxy-1,3,5-triazine. 1937. In German. 1.50

1932-1933 PB L 73919 — Research on the preparation of 2-(2',4'-dicarboxyphenyl) quinoxaline. 1937. In German. 1.50

1933-1934 PB L 73919 — Dianthraquinonylaminobenzene. 1937. In German. 1.50

1935-1945 PB L 73919 — Derivatives of 2-phenylanthraquinone. 1938. In German. 1.50

1946-1953 PB L 73919 — The sulfo-group in anthraquinone dyes. 1938. In German. 1.50

1954-1957 PB L 73919 — Chrome developed dyes of the anthraquinone series. 1938. In German 1.50

1958-1961 PB L 73919 — 1-Substituted anthraquinone-mono- and- diacridones. 1939. In German. 1.50

1961 PB L 73919 — The sulfo-group in anthraquinone vat dyes. 1939. In Germa Continuation. 1.50

1962-1977 PB L 73919 — Chrome developed dyes of the anthraquinone series. 1940. In German. 2.00

1978-1981 PB L 73919 — Progress report for Apr-May 1940. In German. 1.50

1982-1986 PB L 73919 — 2-Chloro-4-amino-5-methoxybenzoic acid. 1941. In German. 1.50

1987-1988 PB L 73919 — 3,4-"Phthalyl"-6-chlorocarbazole carboxylic acid and dyes therefrom. 1941. In German. 1.50

1989-1993 PB L 73919 — New azine synthesis in the anthraquinone series. 1941. In German. 1.50

1994-2006 PB L 73919 — Research in the anthraquinone-acridone series. 1941. In German. 1.50

2007-2008 PB L 73919 — Research with anthraquinone-2,6-dicarboxylic acid. 1941. In German. 1.50

2009 PB L 73919 — Research on the preparation of adipic acid from hexahydroaniline. 1941. In German. 1.50

2010-2011 PB L 73919 — "Bz.1-Bz.2-dicyanobenzanthrone" and the phthalocyanines therefrom. 1941. In German. 1.50

2012-2021 PB L 73919 — Several asymetrically-substituted indanthrenes. 1942. In German. 1.50

2022-2028 PB L 73919 — Ethylation of xylene (includes ethylation of benzene derivatives). 1942. In German. 1.50

2029-2033 PB L 73919 — Progress report for Oct-Nov 1942. In German. 1.50

2034-2036 PB L 73919 — Progress report for Dec 1942 and Jan 1943. In German. 1.50

2037-2039 PB L 73919 — Preparation of 1-amino-8-hydroxy-6-sulfo-3-carboxylic acid. 1929. In German. 1.50

2040-2044 PB L 73919 — Grey triazo-dyes. 1929. In German. 1.50

2045-2047 PB L 73919 — The difference in the dischargeability of azo-dyes prepared from diazo compounds and of n-butyl- and- isobutylnaphthylamine-sulfonic acids. 1930. In German. 1.50

2048-2059 PB L 73919 — Dyes which are suitable for the uniform dyeing of viscose textiles. 1930. In German. 1.50

2060-2065 PB L 73919 — New dyes from methyldichlorotriazine. 1930. In German. 1.50

2066-2073 PB L 73919 — Supplement to Progress Report No. 5 (Dr. Knocke) of Jan 25, 1930. (Frames 2060-2065). In German. 1.50

2074-2075 PB L 73919 — Greenish-yellow copper-developing dyes from naphthol-AS. 1930. In German. 1.50

2076-2077 PB L 73919 — Yellow wool-dyes from 2-aryl-indole-sulfonic acids. 1930. In German. 1.50

2078-2081 PB L 73919 — Detection of ammonia in o-aminophenol dyes treated with tetramino-copper sulfate. 1930. In German. 1.50

2082-2084 PB L 73919 — Methylketol dyes for acetate rayon. 1931. In German. 1.50

2085-2087 PB L 73919 — 2-Cinnamido-7-hydroxynaphthalene as a naphthol base. 1932. In German. 1.50

2088-2090 PB L 73919 — Dyes from 6-(7)-methoxy-2-amino-(or 2-hydroxy)-naphthalenes. 1932. In German. 1.50

2091-2092 PB L 73919 — Sirius-greys which are fast to boiling. 1933. In German. 1.50

2093-2097 PB L 73919 — Report on work on azo compounds. 1934. In German. 1.50

2098-2100 PB L 73919 — Progress report, dated Jan 8, 1935. In German. 1.50

2101-2102 PB L 73919 — Progress report for Jan 1935. In German. 1.50

2103-2105 PB L 73919 — Progress report for Mar 1935. In German. 1.50

2106-2107 PB L 73919 — Progress report for Apr 1935. In German. 1.50

2108-2113 PB L 73919 — Progress report for May 1935. In German. 1.50

2114-2116 PB L 73919 — Progress report for Jun 1935. In German. 1.50

2117-2120 PB L 73919 — Progress report for Jul 1935. In German. 1.50

2121-2122 PB L 73919 — Progress report for Aug-Sep 1935. In German. 1.50

2123-2125 PB L 73919 — Progress report for Oct 1935. In German. 1.50

2126-2131 PB L 73919 — Progress report for Nov-Dec 1935. In German. 1.50

2132-2135 PB L 73919 — Progress report for Jan-Feb 1936. In German. 1.50

2136-2139 PB L 73919 — Progress report for Apr 1936. In German. 1.50

2140-2150 PB L 73919 — Progress report from May-Aug 1936. In German. 1.50

2151-2154 PB L 73919 — Vat-dyes from 1.5-anthracene-carboxyl chlorides. (I.G. patent application III/5659, Mar 1929). In German. 1.50

2155-2162 PB L 73919 — Indigoid dyes from 6-alkyl-β-α-naphthoorothionbene. (I.G. patent application III/5702). 1929. In German. 1.50

2163-2166 PB L 73919 — Preparation of homogeneous halo derivatives from α-chloro-naphthalenes. (I.G. patent application III/5547). 1929. In German. 1.50

2167-2174 PB L 73919 — Dithioxanthones of the anthraquinone series. 1929. In German. 1.50

2175-2177 PB L 73919 — New vat dyes of the aroylamino-anthraquinone type. (I.G. patent application III/5931). 1929. In German. 1.50

2178-2179 PB L 73919 — New vat dyes of the aroylamino-anthraquinone type. (Addition to report No. 4; I. G. patent application III/5953). 1929. In German. 1.50

2180-2184 PB L 73919 — "Dibenzanthraquinonyl," a new yellow vat dye. 1929. In German. 1.50

2185-2195 PB L 73919 — 2.2'-Dianthraquinonyl. (I.G. patent application, III, 6024). 1930. In German. 1.50
This patent application will not reproduce well.

2196-2200 PB L 73919 — Biphenyl-2.2'. 3.3'-tetracarboxylic acid anhydride and its hydrolysis in the synthesis of 1.1'-dianthraquinoyl. 1930. In German. 1.50

2201-2204 PB L 73919 — 6-Methyl-2-(phenyl-4'-carboxyl)-benzothiazole. 6-carboxy-2-(phenyl-4'-carboxyl)-benzothiazole and the reaction products of the carboxylic acid chlorides with α-amino-anthraquinones. 1930. In German. 1.50

2205-2206 PB L 73919 — A new Indigosol-yellow. 1930. In German. 1.50

2207-2213 PB L 73919 — Vat dyes of anthraquinone-2.3-thioxanthonecarboxylic acid chlorides and α-amino-anthraquinones. 1930. In German. 1.50

2214-2215 PB L 73919 — Yellow Indigosols of the anthraquinone-2.3-thioxanthone series. 1930. In German. 1.50

2216-2223 PB L 73919 — Vat dyes from thioxanthone-carboxylic acid chlorides and aminoanthraquinones. 1930. In German. 1.50

2224-2231 PB L 73919 — Benzanthrone, thioxanthone, -xanthone- and- acridone. 1930. In German. 1.50

2232-2238 PB L 73919 — 1.4-Dichloroanthraquinone-5.8-di-carboxylic acid and derivatives. 1931. In German. 1.50

2239-2247 PB L 73919 — New vat dyes from 5.6-benzo-7-chlorothianaphthene. (An interesting blend of the thianaphthene series in the anthraquinone series). 1931. In German. 1.50

2248-2251 PB L 73919 — More yellow Indigosols of the anthraquinone-2.3-(S)-1'2'-(S)-benzene-thioxanthone series. 1931. In German. 1.50

2252-2257A PB L 73919 — Indigoid dyes from isatin-α-chlorides or anilides. (Rest of title is illegible). 1931. In German. 1.50
Report will not reproduce well.

2258-2263 PB L 73919 — 5-Phenylisatin and its use in indigoid dyes. 1931. In German. 1.50

2264-2274 PB L 73919 — The preparation of Bz-3-hydroxy-1.2-benzanthraquinone; Bz-3-hydroxy-1.2-benzanthracene; 1.2-benzanthracene-Bz-3-hydroxy-2-carboxylic acid; and 1.2-benzanthraquinone-Bz-3-hydroxy-2-carboxylic acid, and the use of these compounds for Naphthol-AS dyes. 1932. In German. 1.50

2274-2278 PB L 73919 — Leuco-sulfuric acid esters of several dianthraquinone-azines. 1932. In German. 1.50
Continuation.

2279-2282 PB L 73919 — Research on the commercial preparation of sulfuric acid esters of dianthraquinone-azines. 1933. In German. 1.50

2283-2284 PB L 73919 — The tetrasulfuric acid ester of 3.3'-dichloro-7.8.7'8'-(or 5.5.5'6')-dibenzindianthrones. 1933. In German. 1.50

2285-2288 PB L 73919 — Dyes from anthraquinone-C.4'-carboxyphenyl-1.2-indazole and its N-methyl derivative. By Rösch. 1933. In German. 1.50

2289-2290 PB L 73919 — Dibenzanthrone and isodibenzanthrone-sulfonarylides- and amides. 1933. In German. 1.50

2291-2294 PB L 73919 — A new method for the preparation of 2-aminoanthraquinone-3-sulfonamides. 1934. In German. 1.50

2295-2297 PB L 73919 — Report Oct 16, 1934. In German. 1.50

2298-2301 PB L 73919 — Report Sep 12, 1934. In German. 1.50

2302-2305 PB L 73919 — Progress report for Nov 1934. In German. 1.50

2306-2310 PB L 73919 — Progress report dated Dec 11, 1934. In German. 1.50

2311-2314 PB L 73919 — Progress report dated Jan 1935. In German. 1.50

2315-2317 PB L 73919 — Progress report for Feb 1935. In German. 1.50

2318-2320 PB L 73919 — Fluorination of vat dyes. 1935. In German. 1.50

2321-2326 PB L 73919 — Progress report for Apr 1935. In German. 1.50

2327-2330 PB L 73919 — Progress report for May 1935. In German. 1.50

2331-2337 PB L 73919 — Reactions of hydrogen fluoride. 1935. In German. 1.50

Dyes (contd)

2338-2342 PB L 73919 — Progress report for Sep 1935. In German. 1.50

2343-2348 PB L 73919 — Progress report for Oct 1935. In German. 1.50

2349-2351 PB L 73919 — Progress report for Nov 1935. In German. 1.50

2352-2355 PB L 73919 — Progress report of Dec 1935. In German. 1.50

2356-2359 PB L 73919 — Progress report for Jan 1936. In German. 1.50

2360-2366 PB L 73919 — Progress report for Feb 1936. In German. 1.50

2367-2372 PB L 73919 — Progress report for the month of Mar, 1/2 of Apr, and 2/3 of May. 1936. In German. 1.50

2373-2378 PB L 73919 — Progress report for 1/3 of May, Jun, and 1/2 of Jul. 1936. In German. 1.50

2379-2382 PB L 73919 — Improved method for the preparation of cinnamaldehydes. 1936. In German. 1.50

2383-2390 PB L 73919 — Progress report for 1/2 of Aug and Sep. 1936. In German. 1.50

2391-2402 PB L 73919 — Progress report for Oct-Dec 1936. In German. 1.50

2403-2404 PB L 73919 — Chrome-developing dyes based on Hydron-printing-blue 3R. 1937. In German. 1.50

2404-2406 PB L 73919 — Research on the preparation of a base of the thiazine series for naphthol-AS dyes. 1937. In German. 1.50

2406-2410 PB L 73919 — A new isodibenzopyrenequinone synthesis. 1937. In German. 1.50

2410-2413 PB L 73919 — Carbazoles of the anthraquinone series and their esters. 1937. In German. 1.50

2413-2415 PB L 73919 — Acridones of the anthraquinone series and their esters. 1937. In German. 1.50

2416-2419 PB L 73919 — Copperphthalocyaninesulfonic acids. 1937. In German. 1.50

2419-2424 PB L 73919 — Research on other copperphthalocyanines. 1937. In German. 1.50

2424-2428 PB L 73919 — Vat dyes. 1937. In German. 1.50

2428-2429 PB L 73919 — Isodibenzopyrenequinone. 1937. In German. 1.50

2430-2432 PB L 73919 — Copperphthalocyaninesulfonic acids. 1937. In German. 1.50

2432-2440 PB L 73919 — Pholoylindazoles. 1937. In German. 1.50

2440-2441 PB L 73919 — Azo vat dyes. 1937. In German. 1.50

2441-2442 PB L 73919 — Carbazoles. 1937. In German. 1.50

2443-2444 PB L 73919 — Copper phthalocyanines. 1938. In German. 1.50

2444-2449 PB L 73919 — Research on a green ester of the indanthrone series. 1938. In German. 1.50

2449-2451 PB L 73919 — 1-Chloro-5,6- or 7,8-benzanthraquinone. 1938. In German. 1.50

2452-2464 PB L 73919 — Carbazoles. 1938. In German. 1.50

2465-2468 PB L 73919 — Diaminodianthraquinonyls and diaminohelianthrones. 1939. In German. 1.50

2468-2471 PB L 73919 — Oxazoles, thiazoles, and imidazoles of the 1,2-benzanthraquinone. 1939. In German. 1.50

2471-2474 PB L 73919 — Indigosols from copper phthalocyanines. 1939. In German. 1.50

2474-2478 PB L 73919 — Dyes derived from 5,5'-diaminodibenzanthrone. 1939. In German. 1.50

2479-2482 PB L 73919 — Contribution to the preparation of adipic acid. 1945. In German. 1.50

PB L 70060 — I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. I.G. Farben dye standards. (FIAT microfilm Reel G 19, Frames 1-875). 1929-1942. 874 f. Price: Microfilm-$6.00 - Enlargement Print-$87.50
This reel was prepared by FIAT investigators in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-6 PB L 70060	Suggested I.G. Farben dyestuff standards. n.d. In German.	$1.50
7-19 PB L 70060	Products of the I.G. Farben plants. n.d. In German.	1.50
20-21 PB L 70060	Suggested I.G. Farben dyestuff standards. Feb 26, 1936. In German.	1.50
22-23 PB L 70060	I.G. Farben quality standards. Jan 1929. In German.	1.50
24-875 PB L 70060	I.G. Farben standards, Tables, 1929, 1936, 1937, 1942. In German. Incomplete. Last 783 frames on reel G 20, PB 70061.	85.50

PB L 70061 — I.G. FARBENINDUSTRIE A.G., LUDWIGSHAFEN, GERMANY. I.G. Farben dye standards. (FIAT microfilm Reel G 20, Frames 876-1667). 1929-1943. 792 f. Price: Microfilm-$6.00 - Enlargement Print-$79.50
This FIAT reel consists of two items as listed below, one relating to standards and the other to analytic chemistry. The entire reel may be purchased as a microfilm for $6.00. Please include PB and frame numbers when ordering either item. In German.

Frames	Title	Price
876-1658 PB L 70061	I.G. Farben - standards, Tables, 1929, 1930, 1936-1943. In German. Incomplete. First 852 frames on reel G 19, PB 70060.	$78.50
1659-1667 PB L 70061	Characteristics for reagents in analytic chemistry. 1932. In German.	1.50

PB L 27632. KÖCHERER and WEBER. "Polarbrillantrot 3 B" conc. Geigy. (I. G. Farbenindustrie. Main Laboratory Report) (Frames 5841-5845 of FIAT Microfilm Reel 4 B) Sep 1928. 3 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
In German.

PB L 74004. BAYERISCHE STICKSTOFFWERKE CENTRALLABORATORIUM, BERLIN. Calcium cyanamide. (FIAT Microfilm Reel B 266, Frames 915-1119) 1937-1944. 139 f. Price: Microfilm-$2.25 - Enlargement print-$14.00

This microfilm reel deals mainly with calcium cyanamide and its applications. Other reports deal with the production of magnesium and the decomposition of rock phosphate. The individual items are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
915-944 PB L 74004	These frames are canceled.	
945-950 PB L 74004	Preparation of urea from calcium cyanamide. By Hoffmann. 1945. In German.	$1.50
951-960 PB L 74004	Tests with large-size long furnaces for the production of calcium cyanamide from carbide. By Allmenroeder. 1937. In German.	1.50
961-968 PB L 74004	These frames are canceled.	
969-984 PB L 74004	Trials on the utilization of calcium cyanamide sludge. By Zieke. 1938. In German.	2.00
985-986 PB L 74004	These frames are canceled.	
987-1002 PB L 74004	The influence of contaminations on the spontaneity of calcium carbide. By Karl Zieke and Hans Jäger. n. d. In German.	2.00
1003-1015 PB L 74004	The fire-proofing effect of condensation products produced from calcium cyanamide derivatives. By Zieke. 1937. In German.	1.50
1016-1028 PB L 74004	These frames are duplicates of frames 1003-1015.	
1029-1033 PB L 74004	These frames are canceled.	
1034-1039 PB L 74004	Thermal production of magnesium. By Zieke. 1944. In German.	1.50
1040-1057 PB L 74004	Fire proofing agents: Comparison tests with fire proofing agents from calcium cyanamide derivatives and with such patents from Henkel & Cie. Düsseldorf and I. G. Farben. By Zieke. 1941. In German.	2.00
1058-1070 PB L 74004	Decomposition of crude phosphate in the shaft furnace. By Hinz and others. 1939. In German.	1.50
1071-1091 PB L 74004	These frames are canceled.	
1092-1119 PB L 74004	Ammonia and nitrate formation from calcium cyanamide in dependence on the fertilizer concentration. By K. Rathsack. 1938. In German.	3.00

PB L 74736. DEUTSCHE GOLD- UND SILBERSCHEIDEANSTALT VORM. RÖSSELER, CONSTANCE, GERMANY. Reports on organic and inorganic chemicals. (FIAT Microfilm Reel M 31, Frames 891-1854). 1934-1936. 963 f. Price: Microfilm-$6.00 - Enlargement Print-$96.50.

This FIAT microfilm reel contains 139 items in the field of organic and inorganic chemistry. Individual items are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $6.00. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
891 - 897 PB L 74736	Partial demethylation of pyrogallol-1,3-dimethylether. In German.	$1.50
898 - 901 PB L 74736	Method for preparing acetone chloroform. In German.	1.50
902 - 907 PB L 74736	Experiments regarding formaldehyde. In German.	1.50
908 - 913 PB L 74736	Heat-resistant cellulose-ester films. In German.	1.50
914 - 917 PB L 74736	Production of tanning agents, especially "Tamol". In German.	1.50
918 - 942 PB L 74736	Production of absolute alcohol. In German.	2.50
943 - 957 PB L 74736	Production of sodium phosphate. In German.	1.50
958 - 969 PB L 74736	Production of formaldehyde from methanol(subsequent dehydrogenation). In German.	1.50
970 PB L 74736	Report on pentaerythritol with a high flow point. In German.	1.50
971 - 976 PB L 74736	Experiments regarding formaldehyde. In German.	1.50
977 - 979 PB L 74736	Analysis of wood saccharification products. In German.	1.50
980 - 981 PB L 74736	Sodium xanthates of hexyl- and amylalcohol. In German.	1.50
982 - 987 PB L 74736	Investigation as to the amounts of creosote or guaiacol which can be obtained from various kinds of oil. In German.	1.50
988 - 989 PB L 74736	Sodium xanthates of hexylalcohol. In German.	1.50
990 - 1001 PB L 74736	Brief report on ketones obtained by condensation of alcohols with acetone. In German.	1.50
1002 PB L 74736	β-Chloropropionic acid. In German.	1.50
1003 - 1011 PB L 74736	Production of sodium phosphate. Second report. In German.	1.50
1012 PB L 74736	Third report on the production of a type of pentaerythritol having a high flow point. In German.	1.50
1013 - 1019 PB L 74736	Experiments regarding formaldehyde. In German.	1.50
1020 - 1021 PB L 74736	Processing of tar oil from Brilon to form guaiacol and creosote. In German.	1.50
1022 - 1023 PB L 74736	Sodium xanthates of amylalcohol. In German.	1.50
1024 - 1028 PB L 74736	Comparison of copper impregnated magnesite, active aluminum, and silica gel as to their usability as hydrogenation catalysts for aldehyde in the gas phase. In German.	1.50
1029 - 1064 PB L 74736	Report on research in the field of wet-films in 1934. Production of thin films. In German.	4.00

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Miscellaneous Chemicals (contd)

1065 - 1067 PB L 74736 — Iron zinc manganese catalyst for ketonization of acetaldehyde. In German. 1.50

1068 - 1071 PB L 74736 — Sulfurized wood-tar oils. In German. 1.50

1072 - 1073 PB L 74736 — Purification of pentaerythritol by distillation with superheated steam. In German. 1.50

1074 - 1082 PB L 74736 — 1934 report in the field of wet-films. Production of thick films. In German. 1.50

1083 - 1095 PB L 74736 — 1934 report in the field of wet-films. Production of special films. In German. 1.50

1096 - 1102 PB L 74736 — Processing of tar oil fractions which have high boiling points. In German. 1.50

1103 - 1107 PB L 74736 — Large scale experiments for the production of pentaerythritol. In German. 1.50

1108 - 1111 PB L 74736 — Analysis of acetic anhydride by the freezing point method. In German. 1.50

1112 - 1114 PB L 74736 — Crystallized guaiacol. In German. 1.50

1115 - 1132 PB L 74736 — Easily soluble paraform. Laboratory experiments concerning an objection to a Hungarian patent application. In German. 2.00

1133 - 1138 PB L 74736 — Investigating the reactivity of various high alcohols and of furfural (when added in small amounts to absolute alcohol), or with salicylaldehyde in sulfuric acid solution. In German. 1.50

1139 - 1156 PB L 74736 — Experiments for making formaldehyde trisodium phosphate products (paraformaldehyde) soluble at normal temperature. In German. 2.00

1157 - 1160 PB L 74736 — Plant experiments II and III for the production of pentaerythritol. In German. 1.50

1161 - 1165 PB L 74736 — Impregnation of airplane cloth with triacetyl cellulose according to the "Triaphan" process. In German. 1.50

1166 - 1167 PB L 74736 — Plant experiment IV for producing pentaerythritol. In German. 1.50

1168 - 1170 PB L 74736 — Process for obtaining products (partially and totally dealkylated) from polyalkylated polyhydroxyphenols and their homologues (or derivatives). In German. 1.50

1171 - 1174 PB L 74736 — Process for obtaining o-alkoxyphenols by means of ammonia. In German. 1.50

1175 - 1181 PB L 74736 — Determination of the melting point of pentaerythritol. In German. 1.50

1182 - 1185 PB L 74736 — Carbonisation of lignin. Second report. In German. 1.50

1186 - 1197 PB L 74736 — Acetylation of wood cellulose and description of the resulting products. In German. 1.50

1198 - 1204 PB L 74736 — Verification of the process "Production of soluble paraform". In German. 1.50

1205 - 1207 PB L 74736 — Investigating the accuracy of the Wiesner method by means of determining pure (100%) methylalcohol. In German. 1.50

1208 - 1213 PB L 74736 — Report on the corrosion resistance of several metals to boiling conc. H Cl, in the presence of acetic acid and pyrogallol. In German. 1.50

1214 - 1216 PB L 74736 — Equilibrium of the formaldehyde carbon atom. In German. 1.50

1217 - 1220 PB L 74736 — Fourth report on pentaerythritol. Checking the new Maccagno process on a laboratory scale. In German. 1.50

1221 - 1227 PB L 74736 — Report on the ammonia process for obtaining pyrogallol dimethylether and other o-alkoxyphenols. In German. 1.50

1228 - 1235 PB L 74736 — Esters from alcohols in one operational step. In German. 1.50

1236 - 1240 PB L 74736 — Ethylene cyanohydrin. In German. 1.50

1241 - 1246 PB L 74736 — Guaiacol from Brilon tar. In German. 1.50

1247 - 1251 PB L 74736 — A calcium ferrate catalyst for the production of acetone from alcohol, with use of a special preliminary treatment according to Hüttig. In German. 1.50

1252 - 1263 PB L 74736 — Production of acetaldehyde from acetylene. In German. 1.50

1264 - 1275 PB L 74736 — Testing the new column for the tar oil plant. In German. 1.50

1276 - 1283 PB L 74736 — Analysis of the formaldehyde solutions usually developed in the formaldehyde plants at Mombach and Wildau. Investigation as to the agreement of the elementary analysis with the bichromate method, which are the two methods used in the determination of the carbon equilibrium. In German. 1.50

1284 - 1293 PB L 74736 — Higher alcohols by condensation of several lower alcohols in the gaseous phase. In German. 1.50

1294 - 1298 PB L 74736 — Direct synthesis of butanol from alcohol over the standard catalyst Mg 89 Al 8 Cu 3, with varying throughputs and speed rates. In German. 1.50

1299 - 1302 PB L 74736 — Possibilities as to the increase of the butanol yield during the direct synthesis of ethylalcohol. In German. 1.50

1303 - 1314 PB L 74736 — Analysis of crude wood-alcohol. In German. 1.50

1315 - 1318 PB L 74736 — Higher alcohols by condensation of several lower ones in the gaseous phase. In German. 1.50

1319 - 1321 PB L 74736 — Production of a type of penta erythrital having a flow point above 250° C. In German. 1.50

1322 - 1330 PB L 74736 — Formaldehyde experiments. In German. 1.50

1331 - 1339 PB L 74736 — Propionic acid from ethanol and carbon monoxide over tungstic acid hydrate catalysts. In German. 1.50

1340 - 1349 PB L 74736 Production of methylalcoholic and ethylalcoholic formaldehyde solutions, and investigation of the solubility properties of normal paraform and water-soluble paraform. In German. 1.50

1350 - 1356 PB L 74736 Acetone from ethanol with increased throughputs over iron ("Eisenziegel") with various impregnations. In German. 1.50

1357 - 1365 PB L 74736 Cellulose triacetate impregnations of diagonally woven tissues, for the insulation of generator heads. In German. 1.50

1366 - 1378 PB L 74736 Present status of the wet-film production. In German. 1.50

1379 - 1382 PB L 74736 Quantitative analysis of small amounts of water in acetone. In German. 1.50

1383 - 1386 PB L 74736 Safety-glass intermediate layers made of triacetyl cellulose. In German. 1.50

1387 - 1389 PB L 74736 English synthetic denaturant "D. M. 4"of the I.C.I. In German. 1.50

1390 - 1395 PB L 74736 Determination of minute amounts of water in absolute alcohol. In German. 1.50

1396 - 1400 PB L 74736 Wet-film production. Experiments with varying precipitating baths. In German. 1.50

1401 - 1408 PB L 74736 Laboratory experiments for the preparation of pentaerythritol. In German. 1.50

1409 - 1412 PB L 74736 Adhesive material for "Triphan". In German. 1.50

1413 - 1431 PB L 74736 Production of propylalcohol from propane over propylchloride. In German. 2.00

1432 - 1433 PB L 74736 Determination of methylethylketone by the hydroxylamine process and by the Messinger method. In German. 1.50

1434 - 1437 PB L 74736 Tetraethyllead. In German. 1.50

1438 - 1440 PB L 74736 Experiments for the synthesis of propionic acid. In German. 1.50

1441 - 1447 PB L 74736 Large scale production of pentaerythritol with a high melting point. In German. 1.50

1448 - 1450 PB L 74736 Determination of the H-ion concentration of various types of formaldehyde. In German. 1.50

1451 - 1456 PB L 74736 Purification experiments with crude sulfate turpentine oil. In German. 1.50

1457 - 1460 PB L 74736 Experiments for the clearing up of "Daurag" oil. In German. 1.50

1461 - 1463 PB L 74736 Wetting agent for mercerizing liquor. In German. 1.50

1464 - 1468 PB L 74736 Analysis of various samples of pentaerythritol. In German. 1.50

1469 - 1471 PB L 74736 Shift of the ester equilibrium in acetic acid extraction. In German. 1.50

1472 - 1481 PB L 74736 Paraform and paraform trisodium phosphate. Preparation and analysis of samples. In German. 1.50

1482 - 1485 PB L 74736 Preparation of propionic anhydride and butyric anhydride. In German. 1.50

1486 - 1496 PB L 74736 Annual report on the wet-film production (1935). In German. 1.50

1497 - 1498 PB L 74736 Results of the experimental work in the field of pentaerythritol (September 1935). In German. 1.50

1499 - 1500 PB L 74736 Processing the water resulting in the distillation of tar oil. In German. 1.50

1501 - 1503 PB L 74736 Concentration of the acetic acid from molasses. In German. 1.50

1504 - 1512 PB L 74736 Increasing the yield in the production of acetone cyanohydrin. In German. 1.50

1513 - 1515 PB L 74736 Diluting and wetting agent for "Chrysantol". In German. 1.50

1516 - 1518 PB L 74736 Isopropylalcohol as denaturant. In German. 1.50

1519 - 1522 PB L 74736 Purification of acetic acid contaminated with nitric acid and paraform. In German. 1.50

1523 - 1526 PB L 74736 Diluting and wetting agent for "Chrysantol." In German. 1.50

1527 - 1531 PB L 74736 First runnings containing methylformate. In German. 1.50

1532 - 1535 PB L 74736 Results of the experimental work in the field of pentaerythritol (Oct 1935). In German. 1.50

1536 - 1543 PB L 74736 Preparation of furfural. In German. 1.50

1544 - 1552 PB L 74736 Preparation of a type of pentaerythritol that has a flow point above 250° C. Electrometric tracing of the reaction. In German. 1.50

1553 - 1557 PB L 74736 Production of acetic acid (with a non-offensive odor) from acetic acid of molasses. In German. 1.50

1558 - 1567 PB L 74736 Experiments for the purification of acetone. In German. 1.50

1568 - 1570 PB L 74736 On the occurrence of o-homopyrocatechol methylether in beech-wood creosote. In German. 1.50

1571 - 1578 PB L 74736 The action of the derivatives of pyrocatechol and methylpyrogallol as photographic developer in comparison and in mixture with other developers. In German. 1.50

1579 - 1598 PB L 74736 Production of ethylene chlorohydrin separation. In German. 2.00

1599 - 1603 PB L 74736 The separation and preparation of new photographic substances from tar-oil with a high boiling point. In German. 1.50

1604 - 1606 PB L 74736 Removal of the alcohol from a waste liquor containing sulfuric acid (of the acetiacid extraction). In German. 1.50

1607 - 1609 PB L 74736 Dehydration of alcohol with the aid of solid dehydration agents. In German. 1.50

1610 - 1614 PB L 74736 On the production of tetraethyllead. In German. 1.50

1615 - 1617 PB L 74736 Production of tetraethyllead. In German. 1.50

1618 - 1631 PB L 74736 Experiments for the extraction and azeotropic distillation of

aqueous formaldehyde solutions. In German. 1.50

1632 - 1641 PB L 74736 — Experiments for the preparation of furfural. In German. 1.50

1642 - 1649 PB L 74736 — Acetylation of wood celluloses. Preparation of wet-films therefrom. In German. 1.50

1650 - 1663 PB L 74736 — Some properties of propionyl cellulose and acetopropionyl cellulose. In German. 1.50

1664 - 1671 PB L 74736 — Preparation of paraform soda products and of paraform trisodiumphosphate products, and investigation of their solubility in water. In German. 1.50

1672 - 1674 PB L 74736 — Evaluation of the nitro products of various samples of "Tempoform". In German. 1.50
May not reproduce well.

1675 - 1677 PB L 74736 — Plant production of amyl and hexyl xanthogenates in paste form. In German. 1.50

1678 - 1680 PB L 74736 — Possible uses of urea and hexamethylenetetramine addition products (photographic developers). In German. 1.50

1681 - 1687 PB L 74736 — Purification and processing experiments with raw sulfate turpentine oil. In German. 1.50

1688 - 1690 PB L 74736 — Condensation of normal butyraldehyde. In German. 1.50

1691 - 1704 PB L 74736 — Pressure distillation of aqueous formaldehyde solutions. In German. 1.50

1705 - 1729 PB L 74736 — Concentration of aqueous formaldehyde solutions (of varying concentrations) by vacuum distillation. In German. 2.50
May not roperduce well.

1730 - 1741 PB L 74736 — Investigations regarding wood tar pitch. In German. 1.50

1742 - 1745 PB L 74736 — Deacidification of formaldehyde solutions. In German. 1.50

1746 - 1747 PB L 74736 — Pressure distillation of acetic acid. In German. 1.50

1748 - 1756 PB L 74736 — Chlorinated rubber in combination with oils. In German. 1.50

1757 - 1766 PB L 74736 — Experiments for the purification of acetons and determination of occurring acetone losses. In German. 1.50

1767 - 1768 PB L 74736 — Chlorination of butane. In German. 1.50

1769 - 1773 PB L 74736 — Residual acid from extraction acid occurring in fermentation. In German. 1.50
May not reproduce well.

1774 - 1789 PB L 74736 — Experiments in the chlorophyll plant. In German. 2.00

1790 - 1793 PB L 74736 — Determination of the salt content of potassium sodium acetate salt solutions for the dehydration of alcohol, based on the specific gravity determined by a graphical method. In German. 1.50

1794 - 1804 PB L 74736 — Preparation of thioformaldehyde. In German. 1.50

1805 - 1808 PB L 74736 — Experiments regarding formaldehyde performed in 1936. In German. 1.50

1809 - 1812 PB L 74736 — Analysis of the results of comparative experiments on carbonization at Brücken. In German. 1.50

1813 - 1817 PB L 74736 — Sodium hexyl sodium octyl sulfate for flotation experiments. In German. 1.50

1818 - 1821 PB L 74736 — Preparation of acetaldehyde from acetylene. In German. 1.50

1822 - 1825 PB L 74736 — First runnings of the Schleiden T Acid. In German. 1.50
May not reproduce well.

1826 - 1835 PB L 74736 — Preparation of propionic acid from ethanol and carbon monoxide. In German. 1.50
May not reproduce well.

1836 - 1854 PB L 74736 — Preparation of furfurole from oils of the cleavage column. In German. 2.00

PB L 73863. DOCUMENTS CENTER, GRIESHEIM, GERMANY. Various I. G. Farben laboratory reports. (FIAT Microfilm Reel M-13, Frames 587-1681) 1936-1944. 1094 f. Price: Microfilm-$6.00 - Enlargement print-$109.80. This microfilm reel was prepared by FIAT personnel in Germany. Individual items are listed below and will be available as enlargement prints. The entire reel may be obtained as a microfilm for $6.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
587-592 PB L 73863	Removal of carbonyl sulfide from gases. By Haeubner and Rocky. Nov 15, 1943. In German.	$1.80
593-713 PB L 73863	The approximate calculation of concentration changes in the case of partial liquefaction of hydrocarbon mixtures with many components. By Hegelmann. Mar 25, 1941. In German.	12.80
714-754 PB L 73863	Mechanism of the oxidation of cyclic compounds with nitric acid to dicarboxylic acids (adipic acid, succinic acid). By Heinze. May 15, 1942. In German.	4.80
755-776 PB L 73863	Continuous preparation of adipic acid from cyclohexanol and nitric acid. By Heinze. Jul 24, 1942. In German.	2.80
777-795 PB L 73863	Continuous preparation of succinic acid from tetrahydrofuran and nitric acid. By Heinze. Oct 6, 1942. In German.	2.00
796-822 PB L 73863	Tests in a furnace having a kilo capacity. By Heinzel. Mar 6, 1939. In German.	3.00
823-829 PB L 73863	Catalytic combustion of exhaust carbonic acid. By Heinzel. Mar 15, 1939. In German.	1.50
830-850 PB L 73863	Separation of carbon dioxide from condensed synthesis gases by low-cooling. By Heinze. Mar 31, 1939. In German.	2.80
851-861 PB L 73863	Tests in a furnace having 1 kilo capacity. By Heinzel. Jul 11, 1939. In German.	4.00

862-880 PB L 73863 — Tests in a furnace having 1 kilo capacity. By Heinzel. Nov 20, 1941. In German. 6.00
Third part.

881-891 PB L 73863 — The cold gas shaft furnace. By Heinzel. May 22, 1942. In German. 1.50
Charge number 149.

892-899 PB L 73863 — The boiling-point graph of mixtures of nickel and iron carbonyl at one atmosphere absolute. By Hellriegel. May 6, 1939. In German. 1.50

900-913 PB L 73863 — Simple method for the determination of the reactivity of fuels. By Holder. May 17, 1938. In German. 1.50

914-929 PB L 73863 — Slagging behavior of the coke in the water gas generator. By Hodler. May 11, 1939. In German. 2.00

930-945 PB L 73863 — Rapid method for the determination of the (relative) reactivity (ignition times) of fuels towards air. By Gloth and Hodler. Mar 30, 1940 and Nov 18, 1940. In German. 3.00
See also frame No. 900-913.

946-964 PB L 73863 — Removal of hydrocarbons from butyl oil and from the methanol obtained therefrom. By Indest. May 31, 1938. In German. 2.00

965-968 PB L 73863 — Rapid analysis for small quantities of ammonia in gases. By Indest. August 19, 1938. In German. 1.50

969-998 PB L 73863 — The yields during isobutanol synthesis dependent on gas flow and pressure. By Indest. Nov 10, 1939. In German. 3.00

999-1002 PB L 73863 — Experiments for the desulfurization of gas liquor from coking plants. By Jagla. Oct 11, 1939. In German. 1.50

1003-1021 PB L 73863 — Investigations of the production of adipic acid by oxidation of cyclohexanol with nitric acid. By Jagla. Mar 18, 1941. In German. 2.00

1023-1041 PB L 73863 — Removal of inert gases from the circulation gases of the ammonia synthesis by means of an ammonia-liquid-washing. By Kaeding. Mar 28, 1938. In German. 2.00

1042-1069 PB L 73863 — The physiology and toxicology of artificial fat I. Feeding experiments on rats. By Keil and Appel. Mar 1938. In German. 3.00

1070-1083 PB L 73863 — Silica gel production and analysis. Jun 1, 1939. In German. 1.50

1084-1089 PB L 73863 — Silica gel plant for drying water gas hydrogen. By Gunther. Jan 15, 1937. In German. 1.50

1090-1092 PB L 73863 — Experiments on the drying of liquids by means of silica gel. By Glothe and Lohmeyer. Dec 19, 1938. In German. 1.50

1093-1116 PB L 73863 — Process for the production of alcohols. By Kleem. Dec 14, 1938. In German. 2.50

1117-1136 PB L 73863 — Experiments on the biuret formation in urea solutions. By Milling. n.d. In German. 2.00

1137-1148 PB L 73863 — Criticism of the proposals for the improvement of the production of iron carbonyl in the present technical operation. By Kramer and Kuhn. Jan 26, 1937. In German. 1.50

1149-1154 PB L 73863 — Formic esters and N-alkyl formamides. By Lederle. Nov 12, 1937. In German. 1.50

1155-1158 PB L 73863 — Determination of the moisture content in gases with the aid of a simple dew-point hygrometer. By Lederle. Sep 21, 1937. In German. 1.50

1159-1185 PB L 73863 — Silica gel drying plant for carbon monoxide. By Lederle. Mar 19, 1938. In German. 3.00

1186-1189 PB L 73863 — The absorption of ammonia with silica gel. By Lederle. Mar 21, 1938. In German. 1.50
Second silica gel report.

1190-1199 PB L 73863 — Influence of the temperature of the copper solution and of the specific loading of the solution on the purity of the nitrogen synthesis gas. By Lederle. May 4, 1938. In German. 1.50

1200-1226 PB L 73863 — The production of synthesis gases for "Tenol" and nitrogen at Oppau. By Lederle and others. Aug 15, 1938. In German. 3.00

1227-1233 PB L 73863 — Decrease of the hydrogen losses in the carbon monoxide fine purification of the synthesis gas. By Lederle. Oct 10, 1938. In German. 1.50

1234-1239 PB L 73863 — Provisional pressure water purification. By Lederle and Wengler. n.d. In German. 1.50

1240-1252 PB L 73863 — Experiments for the production of iron oxide with a small loose weight. By Liesseberg. Jan 26, 1938. In German. 1.50

1253-1262 PB L 73863 — Saving of sulfur trioxide in the production of "Lanuss" rayon single. By Liesseberg. Sep 6, 1943. In German. 1.50

1263-1310 PB L 73863 — The oxygen gasification of coal and semicoke in the Winkler-producers Japan II, III, and IV. By Linckh. Dec 15, 1939. In German. 5.00

1311-1314 PB L 73863 — Vitamin C - protection with dry ice. By Link. Jan 24, 1942. In German. 1.50

1315-1319 PB L 73863 — Removal of small quantities of oxygen from electrolytic hydrogen with a "brown oxide" catalyst. By Lomeyer. Jul 16, 1937. In German. 1.50

1320-1358 PB L 73863 — Experiments on the drying of air with fine-porous silica gel. By Gloth and Lohmeyer. Jun 1, 1938. In German. 4.00

1359-1372 PB L 73863 — Experiments for drying air with fine-porous silica gel. By Gloth and Lohmeyer. Jan 7, 1939. In German. 1.50

1373-1395 PB L 73863 — Experiments for drying air with fine-porous silica gel. By

Gloth and Lohmeyer. Jul 15, 1939. In German. 8.00
Part III.

1396-1410 PB L 73863 — Experiments on methane formation from water gas with "B.-S."-catalyst. By Gloth and Hodler. Jul 19, 1940. In German. 1.50

1411-1421 PB L 73863 — Concentrating sulfuric acid. By Lueder. Jun 17, 1943. In German. 1.50

1422-1426 PB L 73863 — Laboratory information on a by-product of chloroprene production. By Mayer. Oct 22, Nov 2, 1936. In German. 1.50

1427-1432 PB L 73863 — Examination of the propyl fraction. By Mayer. May 23, 1938. In German. 1.50

1433-1449 PB L 73863 — Displacement of the explosion limits of ethylene - and ethylene oxide-oxygen-mixtures by addition of nitrogen, carbon dioxide or ethylene. By Metzger. Mar 13, 1940. In German. 2.00

1450-1457 PB L 73863 — Content of the gases of inorganic sulfur in the water gas process, dependant on time. By Metzger. Mar 16, 1940. In German. 1.50

1458-1467 PB L 73863 — The absorption of ethylene oxide by means of aluminum chloride solution. By Metzger. Apr 30, 1940. In German. 1.50

1468-1477 PB L 73863 — The absorption of ethylene oxide by means of an aluminum chloride solution. By Metzger. Apr 30, 1940. In German. 1.50

1478-1511 PB L 73863 — Chemical fireproofing agents for the impregnation of textiles. By Michelitsch. Feb 5, 1940. In German. 3.50

1512-1518 PB L 73863 — Fiber damages caused by fireproofing agents on fabrics containing cellulose. By Michelitsch. Apr 22, 1942. In German. 1.50

1519-1521 PB L 73863 — Fireproofing treatment of fabrics, which are exposed to a dusting with thermite. By Michelitsch. Aug 4, 1943. In German. 1.50

1522-1546 PB L 73863 — Fireproofing agents. Fiber damaging, resistance to glowing and impregnation conditions. By Michelitsch. May 30, 1944. In German. 2.50

1547-1549 PB L 73863 — Surface-active substances from urea-formaldehyde-resins. By Michelitsch. Jun 6, 1944. In German. 1.50

1550-1565 PB L 73863 — Decomposition of rock phosphates for obtaining a granular cyanam. By Mische. Feb 7, 1940. In German. 2.00

1566-1577 PB L 73863 — Low pressure absorption. Oct 29, 1937. In German. 1.50

1578-1581 PB L 73863 — Several new cryolite-like compounds of the alkaline earths. By Woloff. n.d. In German. 1.50

1582-1585 PB L 73863 — Theoretical water consumption of the evaporator column. By Nusselt. n.d. In German. 1.50

1586-1588 PB L 73863 — The use of "Pandermite" for the production of boron fluoride. Nov 26, 1942. In German. 1.50

1589-1610 PB L 73863 — Liquid ammonia. Production of ammonia and the most important utilization purposes/ physical properties/ patents and patent applications/ general literature/ internal literature. By Pfundt. Nov 11, 1937. In German. 2.50

1611-1628 PB L 73863 — Progress of visual conductometry. By Pfundt. n.d. In German. 2.00

1629-1637 PB L 73863 — Plant tests with an ammonia catalyst rich in potassium. By Pfundt. Nov 24, 1937. In German. 1.50

1638-1643 PB L 73863 — Tests of the impurities present in the ammonia synthesis gas at Oppau. By Pfundt. Dec 20, 1937. In German. 1.50

1644-1647 PB L 73863 — Plant experiments with an ammonia catalyst rich in potassium. By Pfundt. Mar 22, 1938. In German. 1.50

1648-1657 PB L 73863 — Explanation of the difference of carbon dioxide values in the pure gas of the pressure water purification and crude gas of the hydrogen purification. By Pfundt. Mar 8, 1938. In German. 1.50

1658-1668 PB L 73863 — Plant experiments with small ammonia furnaces of 300 and 500 mm diameter at pressures of 220-300 atm. By Pfundt. Nov 2, 1938. In German. 1.50

1669-1681 PB L 73863 — Disturbances in the "pressure water purification" caused by impurities of the Rhine water. By Pfundt. Aug 6, 1940. In German. 1.50

PB L 73863-S. DOCUMENTS CENTER, GRIESHEIM, GERMANY. Various I. G. Farben laboratory reports. (FIAT Microfilm Reel B-13, Frames 587-1681, abstract cards) 1936-1944. 115 p. Price: Microfilm-$3.00 - Photostat-$8.00.
Brief abstracts of the individual items on the above FIAT microfilm reel, B-13, PB 73863, prepared by FIAT personnel in Germany.

PB L 84252. I. G. FARBENINDUSTRIE A. G. Reports on organic chemicals. (FIAT Microfilm Reel B 37, Frames unnumbered) 1939-1943. 1096 f. Price: Microfilm-$7.00 - Enlargement print-$111.00
The beginning of this reel contains 19 reports from organic laboratories of I. G. Farben A. G., concerning the preparation of succinic acid anhydride, pimelic acid, mono- and di-chloro-maleic acid anhydride, and related compounds; microanalysis, and superpolyamides. Abstracts of these papers may be found in PB L 84252-S, below. A research report of the "Zellwolle- und Kunstseidering," 1941, follows. The remainder of the reel is taken up by reports on meetings of various chemical groups, 1940, and by "Chemische Berichte" Nov. 1941-June 1942 and Sep.-Oct. 1942. All these last named reports and papers have been issued previously, as PB 50002 to PB 52006, PB 52008 to PB 52015, and PB 52018-PB 52019. Abstracts may be found in the Bibliography, vol. 6, pages 1046 and 1047; vol. 7, pages 21, 23, 100, 192, 313, 574, 680, 681, 863, 864, 948, and 1043; and vol. 8, p. 215. Only the first part of this reel has frame numbers. Therefore only the entire reel may be purchased either as a microfilm or enlargement print form. In German.

PB L 84252-S. I. G. FARBENINDUSTRIE A. G. Reports on organic chemicals. (FIAT Microfilm Reel B 37, Frames unnumbered, abstract cards) 1939-1943. 6 p.
Price: Microfilm-$1.00 - Photostat-$1.00

This item consists of brief abstracts of the reports in the first section of reel B 37 (PB L 84252) described above. The abstracts were prepared by FIAT personnel in Germany.

PB L 70052. I.G. FARBENINDUSTRIE A.G. Reports on organic chemicals. (FIAT Microfilm Reel D 9, frames 1-420). 1912-1945. 419f. Price: Microfilm -$6.00 Enlargement print -$42.00

This FIAT microfilm reel contains chiefly reports on formaldehyde and polymers derived from formaldehyde, including patents and patent applications in the same field. Individual items may be obtained as enlargement prints. Please include PB and frame numbers when ordering an individual items. Most reports are in German, several in English, and a few in French, as indicated below.

Frames	Title	Price
1-13 PB L 70052	Description of operation of the chlorine factory at Gersthofen. Jul 6, 1945. In English and German.	$1.50
14-59 PB L 70052	Production at the plant. Jul 6, 1945. In English and German.	5.00
60-74 PB L 70052	Research in the field of terpenes. Nov 1, 1944. In German.	1.50
75-148 PB L 70052	Development of the production of sodium metal. May 31, 1939 and Oct 15, 1943. In German.	7.50
149-176 PB L 70052	Methods of analysis for controlling operations. Dec 1944. In German.	3.00
177-242 PB L 70052	Report on the camphor plant at Gersthofen. 1939-1940. In German. Handwritten.	7.00
243-270 280-304 PB L 70052	Report on the polymeric formaldehyde. By Dewein. n.d. In German.	3.50
271-274 PB L 70052	Testing of polyhydroxymethylene. By Brandel. Sep 6, 1937. In German.	1.50
275 PB L 70052	Directions for the operation of the Ellenberger vacuum distilling. n.d. In German.	1.50
276-277 305-306 PB L 70052	Directions for the determination of formaldehyde. n.d. In German.	1.50
278-279 PB L 70052	Directions for the operation of evaporators for formaldehyde. n.d. In German.	1.50
280-304 PB L 70052	See frames 243-270.	
305-306 PB L 70052	See frames 276-277	
307-316 PB L 70052	The manufacture of formaldehyde. Feb 1937. In French.	1.50
317-318 PB L 70052	Manufacture of solid polymers of formaldehyde. British patent specification 260 908, dated Jun 26, 1925. In English.	1.50
319-321 PB L 70052	Method of making solid formaldehyde products. French patent specifications 617 032, dated Jun 3, 1926. In French.	1.50
322-323 PB L 70052	Improvements in the manufacture and production of concentrated solutions of formaldehyde or of paraformaldehyde. British patent specification 267 768, dated Jun 18, 1926. In English.	1.50
324-328 PB L 70052	DEUTSCHE GOLD- UND SILBERSCHEIDEANSTALT VORMALS ROESSLER, FRANKFURT/MAIN. Method for the production of solid easily soluble formaldehyde. German patent specification 641 993, dated Nov 30, 1932. In German.	1.50
329-333 PB L 70052	Process for making formaldehyde. American patent specification 2 065 394, dated Aug 2, 1928. In English.	1.50
334-335 PB L 70052	Manufacture of mixed or complete fertilisers. British patent specification 292 968, dated Jun 2, 1928. In English.	1.50
336-340 PB L 70052	KOCHMANN, WILHELM (Inventor) Method and device for treating gases or vapors and for performing reactions. German patent specification 412 320, dated Oct 15, 1912. In German.	1.50
341-342 PB L 70052	KOCHMANN, WILHELM (Inventor) Method for performing chemical reactions. German patent specification 474 075, dated May 6, 1914. In German.	1.50
343-345 PB L 70052	E.I. DU PONT DE NEMOURS & COMPANY INC. WILMINGTON, DELAWARE. Method for the production of easily soluble paraformaldehyde preparations. German patent application P 71 142 IVc/120 (7/01), dated Apr 27, 1934. In German.	1.50
346-348 PB L 70052	HOLZHAUSEN, AUGUST (Inventor) Method for the preparation of formaldehyde solutions. German patent application H 131 552 IVa/120 (7/01), dated Apr 25, 1932. In German.	1.50
349-352 PB L 70052	NEUMANN, EDGAR (Inventor) Method for the production of higher alcohols, aldehydes and ketones from lower alcohols. German patent application N 30 928 IV a/120 (5/02), dated Nov 9, 1938. In German.	1.50
353-356 PB L 70052	DEUTSCHE GOLD- UND SILBERSCHEIDEANSTALT VORMALS ROESSLER. Method for the production of acetaldehyde from ethyl alcohol. German patent application D 63 392 IVa/120 (7/02), dated Dec 10, 1930. In German. Addition to German patent 573 537.	1.50
357-358 PB L 70052	GUTEHOFFNUNGSHÜTTE OBERHAUSEN A.G., OBERHAUSEN/ RHEINLAND. Method for the production of formaldehyde. German patent application G 81 025 IVa/120 (7/01), dated Nov 2, 1931. In German. Addition to German patent application 120. G. 43. 30.	1.50
359-360 PB L 70052	GUTEHOFFNUNGSHÜTTE OBERHAUSEN A.G., OBERHAUSEN/RHEINLAND. Method for the production of formaldehyde. German patent application G 43.30 IVa/120 (7/01), dated Jan 20, 1930. In German.	1.50
361-362 PB L 70052	GUTEHOFFNUNGSHÜTTE OBERHAUSEN A.G. OBERHAUSEN/RHEINLAND. Method for the production of formaldehyde and acetaldehyde form olefines with 2 - 4 carbon atoms in the molecule. German patent application 120 (7/01) G 291.30 IVa, dated Mar 31, 1930. In German.	1.50
363-366 PB L 70052	ZAHN & CO. G.M.B.H. BERLIN. Method for the gradual oxidation of alcohol or aldehyde to acetic acid in one operation. German patent application B 155 015 IVa/120 (12), dated Mar 29, 1932. In German.	1.50
367-375 PB L 70052	DEUTSCHE GOLD- UND SILBERSCHEIDEANSTALT VORMALS ROESSLER FRANKFURT/MAIN. Method for the production of acetaldehyde from ethyl alcohol. German patent application D 60 622 IVa/120 (7/02), dated Apr 17, 1930. In German.	1.50

Miscellaneous Chemicals (contd)

376-379 PB L 70052 — LUCIEN HENRI ROMAN (Inventor) Method for the preparation of formaldehyde. German patent application R 81 956 IV a/120 (7/01), dated Jul 19, 1930. In German. 1.50

380-381 PB L 70052 — DEUTSCHE GOLD- UND SILBERSCHEIDEANSTALT VORMALS ROESSLER, FRANKFURT/MAIN. Method for the production of a solid water soluble preparation containing formaldehyde. German patent application D 61 211 IVa/120 (7/01), dated May 26, 1931. In German. 1.50

382 PB L 70052 — Composition of chloroform- and camphor-spirit. By Deckers. Dec 10, 1945. In German. 1.50

383 PB L 70052 — Production of chromic acid. n.d. In German. 1.50

384-391 PB L 70052 — Production of various waxes. n.d. In German. 1.50

392-393 PB L 70052 — Formulae for polishing wax and shoe polish. n.d. In German. 1.50

394 PB L 70052 — Report on stocks of waxes. By Albrecht. Sep 21, 1945. In German. 1.50

395-411 PB L 70052 — Manufacture of I.G. waxes in the factory Gersthofen. By Hoyer. Oct 20, 1945. In German. 2.00

412-420 PB L 70052 — Esterification of I.G. waxes. By Hummel. Feb 3, 1931. In German. 1.50

PB L 70052-S. I.G. FARBENINDUSTRIE A.G. Reports on organic chemicals. (FIAT Microfilm Reel D-9, Frames 1-420, abstract cards). 1912-1945. 43p. Price: Microfilm -$1.00 - Photostat -$3.00
These are abstracts of the above listed reports (reel D-9, PB 70052). The abstracts have been prepared by FIAT personnel in German.

PB L 73957. I. G. FARBENINDUSTRIE A. G., BITTERFELD, GERMANY. Economy report and statistics. (FIAT Microfilm Reel AA 212, Frames 2712-3578) 1937-1941. 866 f. Price: Microfilm-$6.00 - Enlargement print-$87.00
These reports originate in the National Economy Division of the I. G. plant at Bitterfeld (1937-1941) and deal with the following: I. G. interests in SE Europe; clay works in Europe; clay and aluminum works in France; chemical production in USA, France, Japan, Great Britain, and Italy; report on potassium carbonate, potassium hydroxides, chlorine in Europe (excl. Germany); most important industrial projects in Union of S. Africa; Japanese inorganic industry; Chinese chemical industry; Japanese tar dye industry; world wide calcium carbide industry; organization of Imperial Chemical Industries Ltd.; Japanese chemical industry (joint stock companies), chemical economy and important projects of the Greek chemical industry; Italian commercial relations with SE Europe and the Orient; most important firms in the Hungarian chemical industry; mineral raw products and energy sources of Poland at the end of 1939. 16 individual items are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
2712-2731 PB L 73957	Basis of Dr. Illmer's report concerning I. G.'s interests in southeastern Europe. In German.	$2.00
2732-2734 PB L 73957	Alumina plants in Europe (excluding Germany). In German.	1.50
2735-2737 PB L 73957	Alumina plants and aluminum production in France. In German.	1.50
2738-2751 PB L 73957	The production of various chemicals in the United States, Japan, France, Gt. Britain, and Italy. In German.	1.50
2752-2822 PB L 73957	Soda, caustic alkali, and chlorine in Europe (excluding Germany) at end of 1941. In German.	7.50
2823-2857 PB L 73957	The most important industrial enterprises in the Union of South Africa. In German.	3.50
2858-2933 PB L 73957	The Japanese inorganic industry. In German.	8.00
2934-2987 PB L 73957	The Chinese chemical industry. In German.	5.50
2988-3060 PB L 73957	The Japanese coal-tar dyes industry. In German.	7.50
3061-3275 PB L 73957	Calcium carbide industry (world production). In German.	21.50
3276-3310 PB L 73957	Organization of the Imperial Chemical Industries Ltd. In German.	3.50
3311-3381 PB L 73957	Joint-stock chemical companies in Japan. In German.	7.50
3382-3397 PB L 73957	Chemical economy of Greece and the important chemical enterprises. In German.	2.00
3398-3442 PB L 73957	Italian trade with southeastern Europe and the Orient. In German.	4.50
3443-3493 PB L 73957	The most important chemical firms in Hungary. In German. Several frames are barely legible and will not reproduce well.	5.50
3494-3578 PB L 73957	Poland: Mineral raw materials, power, and lumber. In German.	8.50

DETERIORATION STUDIES (INCLUDING TROPICAL DETERIORATION)

PB L 86357. DEHOFF, H. C. and LEGGETT, M. B. Fungicides with water repellents for plant and field use. (Mass Institute of Technology Memo Rept 176). Oct 1945. 48 p. Price: Microfilm-$2.00 - Photostat-$5.00
The work described in this report was to develop methods for treating CWS items to prevent damage by fungus attack and to examine the effect of water repellents and other treating compounds on the efficiency of fungicides. At least one mixture of a fungicide and water-repellent for field application was found to give satisfactory results, based on laboratory results. Four commercial mixtures can be used, as received or by modification, for field treatment.

PB L 86112. HARVARD UNIVERSITY. UNDERWATER SOUND LABORATORY. Resistance of various finishes to salt spray corrosion. External memorandum. By N. H. Godbold. Dec 1945. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
Twenty types of finishes were tested. The accompanying drawing shows the design and measurements for the testing sample and the location and size of the 5 holes. The tests show that stainless steel, anodized aluminum, and cadmium-plated steel, in the order named, are most satisfactory. If a painted surface is desired then the anodized aluminum with grey enamel or optical black finish is indicated.

PB L 81735. HOUGHTEN, MATTIE. Preservation of materials: Annotated bibliography. (NAVSHIPS Tech Lit Res Series 34). Dec 1944. 40 p. Price: Microfilm-$1.75 - Photostat-$4.00

Deterioration Studies (contd)
This bibliography includes references to the isolation and identification of micro organisms harmful to materials and to their characteristics of growth and habitat under varying atmospheric conditions, also proofing methods for mildew, mold or rot of fabrics and leather, and decay prevention of wood and paper. Informative articles on prevention of destruction by rodents and insects, and descriptions of methods and equipment for maintaining optimum atmospheric conditions complete the set of references.

PB L 81734. HOUGHTEN, MATTIE L. U. S. patents of mildew proofing (1944-1864). A bibliography. (NAVSHIPS Tech Lit Res Series 24). Sep 1944. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00

PB L 85522. WALKER, JAMES E. and HARLAN, ROY C. Climatic and environmental deterioration on AAF equipment within the responsibility of the Aero Medical Laboratory. (AAF AMC Eng Div Memo Rept TSEAA-666-12). Aug 1947. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00
A brief report of the Laboratory is presented. Appendix I describes the function of the laboratory; Appendix II describes current deterioration problems.

ELECTRICAL MACHINERY. EQUIPMENT. AND SUPPLIES

Electronics

PB L 87812. BACHEM, CHRISTIAN. Modulation of centimeter wave transmitters. (AAF T-2 Translation 1888; ZWB FB 1032). Jan 1946. 25 p. Price: Microfilm-$1.50-Photostat-$3.00
Frequency stability and frequency distortion of 5-cm magnetron transmitter during plate and neon-tube modulation are investigated. Wavelength increases by 1 percent if plate voltage increases by 2 percent. With constant plate current or with rapid changes in plate voltages, wavelength is shortened by 1 percent if plate voltage increases by 0.75 percent. Neon tubes are unsuitable for frequencies above several hundred cycles.

PB L 86116. BROOKS, HARVEY and BLACHMAN, N. M. Vibrations of a rectangular frame. (OSRD Rept 6.1 -SR287-1456). Apr 1944. 21 p. Price: Microfilm-$1.50 - Photostat-$3.00
This memorandum considers in some detail the theory of a transducer which consists of a rectangular frame constructed of nickel laminations somewhat after the manner of a rectangular transformer core. Such a transducer relies for its magnetostrictive effect upon the interaction of flexural and compressional vibrations. Harvard University.

PB L 81337. CALIFORNIA UNIVERSITY. DIVISION OF WAR RESEARCH. Outline of proposed program of sound propagation measurements in deep water. Nov 1943. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
The study of sound propagation with primary emphasis on the sonic and low supersonic frequencies (200-20,000 cps.) in deep water (600-2000 fathoms) was assigned. The program outlined in this paper was designed to supplement that of the group working on the sound field of echoranging gear.

PB L 85406. CAWEIN, MADISON. NDRC dissector-camera project, Jul 1, 1942-Jan 1, 1945. Final report. (OSRD Rept 5201; NDRC 5.3 Rept 36). Feb 1945. 81 p. Price: Microfilm-$3.00 - Photostat-$9.00
This is a final report for television equipment utilizing the Farnsworth Image Dissector as a pick-up tube, as developed for high-angle bombing applications. Electrical and mechanical details are described under each item number. Adjustments, operation, and maintenance are discussed under sections 3,4 and 5 respectively. Photographs, drawings, and graphs are attached. Farnsworth Television & Radio Corp., Fort Wayne, Indiana.

PB L 81343. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Installation and operation manual for MTB revisions on USS Eagle 38 at San Diego, California. (Rept D20/DLO/R595, NS 1142). Nov 1943. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00
The changes and additions described in this manual are required to provide a standard arrangement of dials on the bearing indicator in the MARK II Rack, and also to provide the MTB (Maintenance of True Bearing) feature for the standard echo range equipment on the U.S.S. EAGLE 38. Diagrams and unit drawings are included.

PB L 81342. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Installation and operation manual for MTB revisions on USS PC451 at Key West, Florida. (Rept D20/DLO/R611, NS-1142). Nov 1943. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00
The changes and additions described in this manual are required in order to provide a standard arrangement of dials on the bearing indicator in the MARK II Rack, and also to provide the MTB (Maintenance of True Bearing) feature for the standard echo ranging equipment on the USS PC451. Diagrams and unit drawings are included.

PB L 81346. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Installation and operation of NDRC model I A.V.C. unit for NDRC Mark II D-2C indicator-amplifier-control unit for types QC and WAA echo ranging equipment. (Rept D20/R259). Mar 1943. 87 p. Price: Microfilm-$3.00 - Photostat-$9.00
The automatic volume control equipment described in the manual is to be used with MARK II Echo Ranging Equipment. Reference should be made to Instruction Manual D20/R168 of this laboratory for further instructions in connection with this instrument. This manual covers description of the apparatus, principles of operation, operating instructions, and installation instructions. Photographs, drawings, and diagrams are included.

PB L 81344. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Installation and operation of revised MTB unit for Mark II rack on USS Eagle 38 at San Diego, California. (Rept D20/DLO/R620). Jul 1943. 17 p. Price: Microfilm-$1.25 - Photostat-$2.00
The new MTB (Maintenance of True Bearing) unit with associated changes and additions, as described in this manual, is to be installed as a replacement in the MARK II echo range finder. Installation and operating instructions are given. Diagrams and unit drawings are included.

PB L 81345. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Installation and operation of revised MTB unit for Mark II rack on USS PC451 at Key West, Florida. (Rept D20/DLO/R619). Jul 1943. 17 p. Price: Microfilm-$1.25 - Photostat-$2.00

Electronics (contd)

The new MTB (Maintenance of True Bearing) unit, with associated changes and additions, as described in this manual, is to be installed as a replacement in the MARK II echo range finder. Installation and operating instructions are given. Diagrams and unit drawings are included.

PB L 81364. COLUMBIA UNIVERSITY. DIVISION OF WAR RESEARCH. Specification for D. C. power supply filter for ML105 amplifier. (Rept D24/R258). Apr 1943. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

This specification covers the engineering requirements for a noise suppression filter to be used in the D.C. line supplying power to model ML105 amplifier. Drawing - line filter circuit schematic, and photograph - 2 coil line filter are included.

PB L 86242. ECKERT, J. P., JR. and others. Description of the ENIAC, and comments on electronic digital computing machines. (MTRC Applied Math Panel Rept 171.2R). Nov 1945. 82 p. Price: Microfilm-$3.00 - Photostat-$9.00

The ENIAC, described in this report, is the first general purpose automatic electronic digital computing machine. Its speed considerably exceeds that of any non-electronic machine, and its accuracy is in general superior to that of any non-digital machine (such as a differential analyzer). The ENIAC is extremely flexible, and is not fundamentally restricted to any given class of problems. However, there are problems for which its speed is limited by the input and output devices, so that it is impossible to derive the full benefit of its high computing speed in such cases. The ENIAC carries out its entire computing schedule automatically, but the sequence which it is to follow must be set up manually before hand. The intended use of the ENIAC is to compute large families of solutions all based on the same program of operations, in which case the time spent in manual set up can be disregarded. A complete description of the ENIAC is given together with information on the way in which the various units can be used. University of Pennsylvania.

PB L 87864. GEPPERT, H. and SCHAEFKE, F. Basic magnetic oscillation of ellipsoidal cavity resonators. (AAF T-2 Translation 1089). Apr 1947. 30 p. Price: Microfilm-$1.50 - Photostat-$3.00

The author determines the magnetic fundamental vibration of a hollow space resonator bounded by two confocal ellipsoids. He also obtains the corresponding natural frequency as a function of eccentricity and shell thickness of the resonator.

*PB L 81329. GILL, B. G. Interrogation of Mr. Bauch. (BIOS Interrogation Rept 539). Jul 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

This report covers an interrogation of Mr. Bauch who had carried out considerable work on radio frequency problems in Germany and was chief engineer of Berlin broadcasting systems under American control. Magnetic recording was mainly discussed.

PB L 81370. GLENNAN, T. KEITH. An improved echo ranging receiving equipment. Completion report. (Columbia Univ Div of War Res Rept D20/R1376, NS-142). Feb 1945. 35 p. Price: Microfilm-$1.75 - Photostat-$4.00

This report covers the development of the Mark I and Mark II receiving racks at the New London Laboratory and the consulting assistance rendered the Submarine Signal Co. and the RCA Manufacturing Co. in the production models designated by the Navy as QQA and QQB respectively. Photographs and schematic diagrams are included.

PB L 87852. GLOECKNER, H. Investigation of the Hegenberger blind-landing method. (AAF T-2 Translation 1020; ZWB FB 378). Nov 1946. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00

The long-wave transmitter has a range which allows homing from a distance of 85 km. The optimal conditions for recognition of the transmitter signals are investigated. The spatial radiation pattern of a horizontal ultrashort-wave dipole antenna was plotted. Flight at altitudes above 1500 m was necessary for clear signals. At 300 m altitude the width of the warning signal was ± 1100 m, and that of the main signal ± 900 m. At 30 m the corresponding figures are ± 500 and ± 400 m, respectively. The width of the signals at 300 m altitude was ±40 and ±30 respectively.

PB L 87866. GROSSKOPF, J. and VOGT, K. Influence on the ground wave field due to inhomogeneous ground characteristics. (AAF T-2 Translation 1042; ZWB UM 693). Mar 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

A dipole measuring device for determining field strength is described, as well as the method of operation. The device is an aid in establishing uniform propagation characteristics, particularly when inhomogeneity exists, with regard to absorption of the ground wave. It is regarded as a positive requisite for direction finder stations.

PB L 87815. HAHNE, WALTHER. Impulse-modulation oscillator C 299. (AAF T-2 Translation 2020). Jan 1948. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00

Five-tube impulse-modulation oscillator used for modulating magnetron oscillator of 5-cm wavelength. Oscillator supplies HF impulses of 30 megacycles with impulse width of approximately 50 cycles and pulse frequency of 7 kc. Apparatus consists of 7-kc oscillator, gas triode stage for generation of DC impulses, and 30-megacycle output stage.

PB L 81054. HANSON, R. O. General Electric model 20 N wire recorder. (Columbia Univ Div War Res Memo P37/R509). May 1944. 23 p. Price: Microfilm-$1.00 - Photostat-$2.00

This report concerns changes made on the 20 N magnetic wire recorder to improve its frequency response and adapt it for use specifically with radio receivers. Schematic drawings showing the unmodified 20A circuit arrangement and for 20N showing modifications, with graph and photographs are attached.

PB L 81048. HANSON, R. O. and WATKINS, W. B. Operating and servicing instructions Presto model 6N disc recorder. (Columbia Univ Div War Res Memo P37/R1257). Nov 1944. 40 p. Price: Microfilm-$1.00 - Photostat-$3.00

Full instructions are given. The 85A recorder amplifier has three stages of class A amplification. Input impedence, 500/200/125/50 ohms. Normal at 500 ohms - actually unterminated. The 40A pre-amplifier: input impedence, 50/200/500 ohms, output impedance, 500 ohms. Tubes: 85A amplifier, 2-6J7's, 2-6C5G's, 2-2A3's, and 1-5Z3. The 40A pre-amplifier, 1-6SJ7, and 1-6J7. Gain: 85A amplifier, 93db - 10 watts. The 40A pre-amplifier, 42 db. Power supply rating: 85A amplifier, 105-125 volts, 50-60 cycles, 85 watts. The 40A pre-amplifier, 105-125 volts, 50-60 cycles, 5 watts. The turntable, 105-125 volts, 60 cycles, 60 watts. Graphs, photographs and drawings are attached.

PB L 81360. HERRNFELD, FRANK P. A.C. operated topside listening amplifier. (Columbia Univ Div of War Res Rept

Electronics (contd)
D24/R343). May 1943. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This memorandum gives description and electrical specifications for amplifier 12933BE designed by Columbia University for top-side sonic listening. One unit drawing and three charts are included.

PB L 81359. HERRNFELD, FRANK P. Oscillator (125KC) for use with high fidelity tape recorder. (Columbia Univ Div of War Res Rept D13/R344). May 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00
This memorandum describes the subject oscillator unit and also gives the electrical specifications. A unit drawing 12937BE is included.

PB L 81352. HERRNFELD, FRANK P. Supersonic converter-amplifier. (Columbia Univ Div of War Res Rept D24/R347). May 1943. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
A supersonic converter-amplifier, designed to provide listening facilities in the supersonic region with a magnetostrictions hydrophone has been completed. This report describes the function of the instrument and gives the electrical specifications. Drawings, diagrams photographs and charts are included.

PB L 81358. HERRNFELD, FRANK P. Test listening amplifier. (Columbia Univ Div of War Res Rept D24/R346). May 1943. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00
This amplifier has been designed for sonic and ultrasonic listening. Electrical specifications and description are given in this memorandum. Six charts are included.

PB L 85435. HOLT, LEE E. The German use of sonic listening. n. d. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
A comparison is made of U. S. and German listening devices and concludes with this statement "Nevertheless, by careful application of the principles of streamlining and by willingness to alter hull design to meet the requirements of the sonic array, the Germans gave their naval vessels a passive listening ability which may perhaps have surpassed that possessed by the ships of any other country."

PB L 81313. HUNT, C. H. Interrogation of Prof. A. Esau. (CIOS ARCO Rept 15A). Jun 1945. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
The interrogation was not general but was directed specifically towards obtaining information related to research and development on vacuum tubes and cathode ray tubes. Information obtained is presented in this report.

PB L 87826. JAUMANN, J. Electrical absorbing material. (AAF T-2 Translation 4626). Jan 1948. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
Electric sump is defined as an absorbing layer which permits the least reflection of beams falling upon its surface. Its nature is such that it is independent of frequency of the wave striking it but has a limit as to the wave length with reference to the thickness of the layer. Reflections are of three kinds, those from the outer surface of the layer, those from the back layer or metal itself, and those within the layer itself due to electron changes within the layer.

PB L 87841. KAULE, H. Basic investigations on the question of frequency direction finding. (AAF T-2 Translation 914; ZWB FB 749). 18 p. Price: Microfilm-$1.25 - Photostat-$2.00
A moving aircraft transmits oscillations to the ground stations, which stations amplify and reflect them back to the aircraft. However, the frequencies and not the amplitudes of these waves are measured and differences in frequency are determined, sometimes acoustically, between transmitter and receiver on the aircraft. Direction finding results by observing harmonics of these waves, lengthening or shortening of frequencies, known as the Doppler principle in astronomy.

PB L 86115. KIRKLAND, ROBERT E. Reactance tube frequency control. External memorandum. (NDRC Sect 6.1-sr267-1344). Jan 1944. 22 p. Price: Microfilm-$1.50 - Photostat-$2.00
There are at least three basic circuits available for varying the frequency of conventional high-frequency oscillators as a function of control voltage. Of these there is one which, though little more complex than the others, seems to offer greater possibilities. It is the purpose of this paper to examine the three circuits briefly and determine their limitations, and to develop a design procedure for the superior circuit which makes possible the determination of the amount and seriousness of departure from ideal operation. Tables, drawings and curves are included. Harvard University.

PB L 81191. LATIMER, K. E. Interrogation of Dr. H. Kaden: Coaxial cables. (BIOS Interrogation Rept 380). Feb 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
Dr. H. Kaden is head of the Cable Laboratory, Siemens and Halske. This interview did not yield very much information beyond what had been obtained in earlier interviews. It also appeared Dr. Kaden had been working very much in a water-tight position as he knew little of what one would have imagined would be of interest to such an official. Application of telephony and television to coaxial cables are additional information to what has been noted in previous interviews and Dr. Kadens information on these are given in this report.

PB L 81353. LOYE, D. P. and others. Sonic and supersonic tests aboard submarine USS S-20, May 8, 1943. (Columbia Univ Div of War Res Rept D24/R360). May 1943. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
The tests were made for the purpose of determining for sonic and supersonic listening the relative merits of the 2-foot toroidal hydrophone as compared to the 3-foot straight wood core hydrophone with a stream-lined baffle. A trial of sonic listening using the JK crystal head which had been initially tried out on the USS SEMMES was also made. The equipment is described and results of tests are given. A unit drawing is included.

PB L 87811. MACEK, OTTO. Method of identifying metal bodies by means of centimeter waves. (AAF T-2 Translation 1021; ZWB UM 4008). Jan 1948. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
Procedure described permits detection of presence of metallic bodies. Detection occurs the instant flight is directly over bodies. Presence of metallic bodies registered in low-flying aircraft by means of reflected electromagnetic waves. Results of such equipment with 5.6-cm wavelength noted.

PB L 81378. MCGEENEY, J. J. Comments on the chemical recorder. (Columbia Univ Div of War Res Rept D20/R265). Apr 1943. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

Electronics (contd)

On a visit to the West Coast Sound School it was found that the Chemical Recorder was considered one of the more important conning aids in use today and also one of the least dependable pieces of equipment. It was characterised as a "necessary headache" and its frequent failure necessitated the use of valuable time to teach sound and conning officers the stop watch and maneuvering board method of making an attack. In this memorandum 12 defects are listed with suggestions that the matter be brought to the attention of the manufacturer.

PB L 81339. MCNOWN, JOHN S. and ECKART, CARL. Effect of the ship's roll on echo ranging. (Calif Univ Div War Res Rept UCDWR M114). Oct 1943. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

This report concerns work done by the University of California Division of War Research for the National Defense Research Committee. It is commonly accepted in naval circles that echo ranging is more difficult in rough weather than in calm. This memorandum is an attempt to calculate the average reduction in echo intensity and in the echo-reverberation ratio, as caused by the roll of the ship. The calculations are considerably oversimplified, but may be of interest nonetheless.

PB L 87855. MAURER and BERNDORFER, F. Adaptation and and bandwidth of FuG-216 antenna. (AAF T-2 Translation 1004; ZWB UM 4001). Apr 1947. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00

Study issued by Flugfunk-Forschungsinstitut as supplement to previous study FB-1713. Impedance diagrams explain the matching of the antenna. Calculations and formulas on longitudinal induction and frequency-response curve are given. Investigations of the frequency-response within the frequency range of FuG-217 and that the circuit tuning is relatively insensitive to frequency variations, but not to variations of the antenna impedance to be matched.

PB L 87865. MAURER. Antennas of the "Neptun R" installation. (AAF T-2 Translation 1092; ZWB FB 1713). Apr 1947. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00

A directional-antenna system (Yagi-antenna type) which was developed for installation in airplanes is described. Some electrical properties and the matching of the cable to the "Neptun R" antenna are treated.

PB L 87840. NEUBAUER. Radio reception interferences by the ignition system. Partial report I: Evaluation of various spark plug shieldings in ultrashort-wave reception. (AAF T-2 Translation 909). Nov 1946. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

Experiments made in the airplane and vibration tests in the testing chamber show that the spark plug shielding hoods with holder stirrup when soiled and fouled up with oil, show too large and changeable resistances to sparking between the hood and the spark plug hexagon and in consequence disturbances are caused by the ignition system. The arcing resistance is further decreased by the corroding of the spark plug holder rings and stirrup.

PB L 87867. RUNGE, W. T. Influence of the reflected impulse shape upon the range and measurement of range. (AAF T-2 Translation 1846; ZWB UM 795). Mar 1947. 11 p. Price: Microfilm-$1.25 - Photostat-$2.00

The total energy of a pulse is the determining factor for the range and the form of the pulse is not very essential for this. This form is also not of importance for the accuracy of measurement of E with a cathode-ray tube with a given duration of pulse. The rectangular form is best for resolution at close distance. The triangular pulse of the same duration has a time-base 1 pt 4 times as great.

PB L 87869. RUNGE. "Knickebein" homing antenna device. (AAF T-2 Translation 2603). Mar 1947. 27 p. Price: Microfilm-$1.50 - Photostat-$3.00

Knickebein is a directional antenna which is used for navigational purposes. A detailed description, together with pictures and diagrams explain the operation of the whole system.

PB L 80893. SCHENCK, CARL.G.M.B.H., DARMSTADT, GERMANY. Electric precision balancing machine with oscillographic indicator. 1944. 25 p. Price: Microfilm-$1.00 - Photostat-$2.00

This document contains a general discussion on requirements for balancing machines, as well as a description, operating, and maintenance instructions for the R11 electric precision balancing machine with an oscillographic indicator. Graphs and drawings are included. In German.

PB L 81349. SNOW, W. B. and BUMBAUGH, H. L. Interval tests. (Columbia Univ Div of War Res Rept D13/R249). Apr 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

An investigation was undertaken to determine if an optimum length of listening interval exists when switching from one hydrophone to another in a series of cable-connected hydrophones or from one buoy to another in the case of radiosonic buoys. The test set-up, and the method of conducting the tests are described. The data obtained are shown plotted on attached curves.

PB L 81376. SNOW, W. B. Listening tests in PBY. (Columbia Univ Div of War Res Rept D34/R348, AC 55). May 1943. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

The purpose of these tests was to determine how effectively an airplane can listen to various types of directional hydrophones. The radio receiver used was the regular equipment of the plane. The tests are described and results given in this memorandum.

PB L 81347. SNOW, W. B. Topside listening gear. (Columbia Univ Div of War Res Rept D24/R252). Apr 1943. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

Fifty topside listening gears being built for the Navy required loud-speaker reproduction be provided in addition to headphone listening. It seemed that the only loud-speaker which could be definitely counted upon to stand up under submarine service would be the RCA or Sub Signal Co. loud-speaker normally used with echo-ranging equipment. This memorandum describes the comparison test made and results obtained. A chart showing frequency in cycles per second is included.

PB L 81319. SODERMAN, R. A. Notes on interrogation of Prof. Muller (Meyer), London, June 5, 1945. (CIOS AHCO Rept 27A). Jun 1945. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

This report covers interrogation of Professor Müller (Meyer) who had been in charge of technical liaison on radar problems between the research organizations under Professor Esau and the Air Force. A brief listing of Professor Müller's career is given. This interrogation is principally concerned with questions on the effect of jamming of GL Radars by the Allies. The information obtained is presented in this report.

PB L 87870. U. S. ARMY AIR FORCES. AIR MATERIEL COMMAND. Air-borne radar search set Rostock. (T-2 Translation 3009). Apr 1947. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00

Electronics (contd)

tests were performed to determine the operational characteristic of the Rostock radar search set. The equipment has a range of 30 km at an altitude of 2000 m but is considered inaccurate for 2 to 5 km distance measurements. Distance measurements for torpedoing and bombing are inaccurate, range is very small and antenna power output too great. Rostock is considered advantageous however, due to its small power use and light weight.

PB L 81895. U. S. BUREAU OF AERONAUTICS. Elimination of radio interference in aircraft. (NAVAER Rept 16-50-517). Mar 1946. 260 p. Price: Microfilm-$7.00 - Photostat-$26.00

This publication is subdivided into fourteen sections having the following headings: Section 1, the history and importance of the radio interference problem; (2) the nature and source of radio interference in aircraft; (3) radio interference coupling and paths of entry to receiver; (4) instructions for practical radio interference reduction in service aircraft; (5) ignition interference; (6) radar interference; (7) interference originating from rotating equipment; (8) precipitation static interference; (9) installation requirements for interference free operation; (10) design consideration for new equipment; (11) radio interference filters; (12) instruments for radio interference measurements; (13) procedure for making complete radio interference surveys in aircraft; and (14) appendix. Tables, diagrams, charts, and illustrations are included.

PB L 88635. U. S. BUREAU OF SHIPS. Instruction book for model DAQ high frequency: Radio direction finder system. (Manufactured by Federal Telephone and Radio Corporation, Newark, N. J.). (NAVSHIPS 233). Apr 1945. 185 p. Price: Microfilm-$5.50 - Photostat-$19.00

PB L 86873. U. S. NAVAL TECHNICAL MISSION TO JAPAN. Japanese radio equipment. (Index E-08). Dec 1945. 12 p. Price: Mimeo-$0.50

Japanese radio techniques were conventional and in large part obsolete. Since it was possible, however, that there were some items of equipment of intelligence value in the laboratory or pre-production stages, all known sources of information on such equipment were investigated. In addition, information was collected on the latest types in actual service, and a number of items of equipment not previously studied were examined. Enclosures A-C list the documents and equipment shipped and where sent.

PB L 86363. U. S. WAR DEPARTMENT. Radar electronic fundamentals. (Tech Manual 11-466). Jun 1944. 477p. Price: Microfilm-$7.00 - Photostat-$48.00

PB L 86362. U. S. WAR DEPARTMENT. Radar system fundamentals. (Tech Manual 11-467). Apr 1944. 396 p. Price: Microfilm-$7.00 - Photostat-$40.00

PB L 81485. U. S. WAR DEPARTMENT. Repair instructions: Rectifier RA-34-A, -B, -C, -D, -E, -F, -G, -H, and -J. (Tech Manual 11-4701). Jul 1945. 140 p. Price: Microfilm-$4.25 - Photostat-$14.00

PB L 81374. WESTNEAT, A. S. Operation of QC-BDI rack test set. (Columbia Univ Div of War Res Rept D20/R041). Dec 1943. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

This memorandum describes the operation of the QC-BDI rack test set. The equipment is comprised of two units, a vacuum tube voltmeter amplifier and an oscillator mounted on one chassis.

PB L 81312. YATES, J. Y. Notes on interview with Dr. Esau. (CIOS ARCO Rept 14A). May 1945. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

Dr. Esau had been president of the Physikalische Reichsanstalt since 1939. In addition he was director of a number of other research institutes, chiefly engaged in high frequency problems. He had been engaged on this subject since 1905. In this report Dr. Esau explains the general set-up of the Reichsanstalt and its work.

Miscellaneous

*PB L 87369. ASHFORD, B. O. and others. Sheathing of cables with aluminium. (BIOS Final Rept 1550, Item 21, 31). Sep 1947. 24 p. Price: Microfilm-$1.50 - Photostat-$3.00

The present investigation was concerned largely with extrusion plant and accessories manufactured to Scholmann design and the technicians associated with the development of it. The following data are covered: extrusion on vertical press, extrusion on horizontal press, installation and service behavior of aluminum sheathed cables, and alternative methods of sheathing with aluminum. Drawings are included.

*PB L 87392. BOAG, D. J. W. and others. Development of the Agil R.N.D. electrode for welding German armour plate: Composite interrogation report of Dr. Wilhelm Schieffelbein. (BIOS Final Rept 1227; Interrogation Rept 427, Item 9, 21). Mar 1947. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00

This electrode has been employed successfully for the welding of armour plate up to 180 mm. thickness. The following data are covered: (a) composition of wire, (b) coating, notes on coating composition, (c) binding agent, (d) extrusion and drying, (e) mechanical properties of the weld, and (f) reproduction of the electrode R.N.D.

*PB L 81197. BRITISH INTELLIGENCE OBJECTIVES SUB-COMMITTEE. Interrogation of Prof. R. Hilsch: Research on cathode ray tubes and semi-conductors. (Interrogation Rept 423). Feb 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

During the interrogation of Professor R. Hilsch the following subjects were discussed: thin films of alkali halides; screens which darken on exposure to an electron beam; fundamental work on semi-conductors; semi-conductor amplifiers; and supra-conductivity of semi-conductors. The information obtained on above subjects from Professor Hilsch are presented in this report.

PB L 81306. BURNHAM, KENNETH. Junkers, Dessau, and dispersals. Electrical report. (CIOS ARCO Rept 4A). n. d. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

This report covers a visit to Junkers, Dessau, Germany, May 18 to June 3, 1945. The report is divided into two parts, (1) a brief description of daily activities and (2) a more detailed report on the interrogation of Junkers personnel and visits to scattered Junkers targets. Four photographs are included.

PB L 87822. DRODOFSKY. Electrical circuits for telemetering and computing. (AAF T-2 Translation 3092). Jan 1948

Electrical, Miscellaneous

o p. Price: Microfilm-$1.00 - Photostat-$1.00
Computer circuits are based on: Wheatstone Bridge for multiplication in Ohm's law, addition in current distribution, integration in charging of condenser, differentiation for transformer voltage, and telemetering for measuring current at several points in same circuit. Circuit arrangements discussed as well as accuracy with which expressions may be represented.

PB L 85683. FINKELNBURG, W. Remarks on the chemistry of the high-current carbon arc. (Accurate Translation Service Rept 50). May 1941. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
The relationship between the physical and chemical processes in the high-current carbon arc (homogeneous-carbon arc and Beck arc) are discussed and it is shown where the collaboration of the physical chemist is required and how, on the other hand, the high-current carbon arc can be of interest to the chemist. The purpose of the report is to acquaint the chemist with the characteristics of this form of arc and to point some special problems in physical chemistry. Translated from the German.

* PB L 86706. KUHRING, M. S. and others. High speed oscillograph. (BIOS Evaluation Rept 436) Mar 1946. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00
Investigation was made of Hochspannungs Gesellschaft Fischer at Cologne-Zollstock. The products of the company include equipment for the testing of high tension electrical equipment. Among these are the following: oilless transformers; induction coils; cable testing equipment; and cathode ray oscillograph.

* PB L 87388. MORRIS, LANGLEY A. and others. German transformer industry (with special reference to small transformers). (BIOS Final Rept 682, Item 31). Feb 1946. 56 p. Price: Microfilm-$2.25 - Photostat-$6.00
The investigation consisted of visiting 16 targets which are reported individually. Diagrams, tables, and graphs are included.

PB L 87861. PATIN. Supersensitive movable-coil type DC-relays without spring bias, for automatic and tele-control and tele-metering. (AAF T-2 Translation 1066). Apr 1947. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00
Detailed descriptions, including data and schematic diagrams of various kinds of unconventional movable coil relays, such as control relays, DP-DT (double-pole, double throw) relays, pulse relays, etc. Some types have control-potentiometers and are torque-less models. Applicable to electronics drone-control, telephony. power, etc.

PB L 85714. SCHAFER, H. G. and ROBERTS, W. B. Report of tests made on Japanese signals and indicators. (Naval Res Lab Test Rept 658). Aug 1947. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00
Eight units of captured Japanese equipment were submitted for tests. The object of this investigation was to study the design features and to determine the operating characteristics of this equipment. Photographs of; two vibrator horns, four hand-cranked sirens, two anemometers are included as well as drawing, schematic diagram of horn circuit, and tables.

PB L 86350. SIEMENS - SCHUCKERTWERKE A. G. Siemens spot welders WP3, WP4, WP5, and WP6; Description and operating and maintenance, instructions. 1939. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
This instruction manual includes photographs, and drawings. In German.

PB L 81885. U. S. STRATEGIC BOMBING SURVEY. (PACIFIC). CAPITAL EQUIPMENT & CONSTRUCTION DIVISION. Japanese electrical equipment. Nov 1945. 55 p. Price: Microfilm-$2.25 - Photostat-$6.00
The Japanese Survey differed from the European operation in that its purpose was to study the role of airpower in the war in the Pacific including all types of air attack. The Japanese electrical industry report covers an investigation of the adequacy of this industry to meet the demands on it, the effects of bombing, and its vulnerability to attacks of various kinds. Attached are exhibits A-Q consisting of tables and diagrams also a list of reports of the USS BS on the European war.

FOOD AND KINDRED PRODUCTS

PB L 82151. CLAASSEN, H. (ed.). The production of sugar with special regard to the factory. (PIAT Microfilm Reel B 255, Frames 3835-4025) 1943. 191 f. Price: Microfilm-$5.75 - Enlargement print-$21.00
Publishers: Schallehn & Wollbrück, Magdeburg. 7th edition. 1943. 380 p. In German.

* PB L 87578. HINTON, C. L. Technical aspects of pectin manufacture in Germany. (BIOS Final Rept 388, Item 22). Oct 1945. 46 p. Price: Microfilm-$2.00. Photostat-$5.00
This report is divided into four sections: (1) general survey-firms visited, supplies of material, drying of pomace, its storage, extraction of pectin, separation of extract, re-extraction of pomace, enzyme treatment, filtration, concentration, jelly standardisation, preservation and storage, spray-drying, yields, fuel consumption, labor costs, disposal of output, constructional materials, experimental developments in manufacture, and conclusions; part (2) visits to firms manufacturing pectin; part (3) visits to firms having subsidiary outlets for pectin; and part (4) visits to firms making materials or apparatus used in pectin manufacture.

PB L 87480. HOWARD, LOUIS B. Report on investigation for the Food and Agriculture T.I.I.C. Subcommittee. Sep 1945. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
Results of an interview with Dr. Rudolph Plank who has directed his studies, in the food processing industry, largely along the line of the thermodynamics of the freezing process. He was most cooperative and helpful in identifying and establishing the whereabout of individuals experienced in particular phases of food processing. He stated that both the yield and sweetness of the juices from various fruits (and possibly vegetables) could be markedly increased by slow freezing the whole fruit at about -10° C and subsequent storage at about -3° C. By this means a maximum of cell rupture followed by slow enzyme action is achieved and subsequent pressing of the defrosted materials gives a higher yield of better quality juice. A list of bulletins and reprints describing the investigations of Dr. Plank, which were evacuated, is given.

PB L 7736-S16. KARSCH, K. Studies on the lead content of dried yeast. (Supplement to PB 7736) (PIAT Final Rept 499, Supp) May 1943. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document is a supplement to PB 7736 (Locke, Sasman and Dickerman), Production of wood sugar in Germany and its conversion to yeast and alcohol. Bibliography, vol. 1, p. 492. After a preliminary review of the toxicology of lead the problem of detecting lead is discussed. The quantitative analysis of lead with "Dithizon" is described in detail. The results of testing yeasts from Tornsch, Deutsche Bergin. Waldhof and Phrix-Werke by this method are given. The lead

contest of Tornesch yeast proved to meet the requirements of the "Reichsgesundheitsamt." In German.

PB L 7736-S17. BUTSCHEK, O. The suitability of yeast produced from sulfite waste liquor for human and animal nutrition. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Dec 1944. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document is a supplement to a report on the "Production of wood sugar in Germany and its conversion to yeast and alcohol," by Locke, Saeman and Dickerman (Bibliography, vol. 1, p. 492). Extensive investigation into the pertinent literature shows the high value of baker's yeast as human foodstuff and animal feeding material. Because of the perfect quality of its protein and particularly its high vitamin and lipoid content, it is considered equivalent to other protein carriers. Regarding the value of yeast produced from beech wood sulfite waste liquor by the aeration process, results of chemical analyses and feeding experiments on animals are cited. It is concluded from numerous data of these investigations that sulfite liquor yeast is in no respect inferior to yeast from other sources. In German.

PB L 7736-S18. WINCKEL, MAX. The ingredients of yeast and their importance for human nutrition. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Feb 1941. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00
This paper is a supplement to a report by Locke, Saeman and Dickerman on the "Production of wood sugar in Germany and its conversion to yeast and alcohol" (Bibliography, vol. 1, p. 492). The nutritional value of yeast is attributed to the combined and complex action of its numerous valuable constituents. Fresh and dried beer yeast and dried baker's yeast were analyzed with regard to their nutritional values. Data are given of their protein contents, of the quality of this protein, of their mineral salt contents, of the varying content of their fats. Special attention is paid to the lipoids, to the physiological importance of the glutation, the vitamins B_1 and B complex and to the cause of the ferment stimulating action of yeast. In German.

PB L 7736-S19. CRASEMANN, E. and TSCHERNIAK, A. The feeding value of wood sugar yeast in hog fattening. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Feb 1939. 17 p. Price: Microfilm-$1.00 - Photostat-$2.00
This paper is a supplement to a report on the "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman (Bibliography, vol. 1, p. 492). The arrangement of an experiment for the study of the value of wood sugar yeast in hog-fattening is reported. The effect of (1) yeast, (2) fish-meal, and (3) a mixture of yeast and fish-meal used as supplementary fodder to a basic diet was studied on several groups of animals. Due consideration was given to the different protein contents of the supplementary fodders and to the deficit in calcium and phosphorus of fish-meal. The experimental data were evaluated physiologically and economically. It was concluded that wood sugar yeast can only partially replace ordinary carriers of animal protein in hog-fattening. Suggestions are made as to the proper composition of supplementary fodder based on yeast, when used for the above purposes. Several tables are included. In German.

PB L 7736-S20. RECIPES with yeast. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) May 1945. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document is a supplement to a report on the "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman (Bibliography, vol. 1, p. 492). The first part deals with recipes for yeast flakes. The properties of this preparation are stated and recipes for making soups, gravies, vegetable and meat dishes with the use of yeast flakes are described. In the second part the preparation and properties as well as the various possibilities of application of "Südholag Nutrition Yeast," "Südholag Condiment Extract," and "Südholag Condiment" are reported. In German.

PB L 7736-S-21. SÜDDEUTSCHE HOLZVERZUCKERUNGSWERKE A. G., REGENSBERG, GERMANY. Description of makings by the Süddeutschen Holzverzuckerungswerke-Aktiengesellschaft, Regensburg. (Supplement to PB 7736). (FIAT Final Rept 499, Supp.). Jun 1945. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document gives a working method for the production of wood sugar, in Germany, and its conversion to yeast, and is a supplement to PB 7736; v. 1, p. 492, this Bibliography.

PB L 7736-S-22. ZELLSTOFFFABRIK-WALDHOF, MANNHEIM, GERMANY. Yeast-culture from whey. (Supplement to PB 7736). (FIAT Final Rept 499, Supp.). Nov 1944. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
The Waldhof process of yeast culture from whey is given. Six advantages of this method over other methods are listed. The original article is attached. Translation.

PB L 7736-S23. KIEL and OCHEL. Erection of a plant for the manufacture of yeast. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Jun 1943. 29 p. Price: Microfilm-$1.00 - Photostat-$2.00
This is a supplement to PB 7736 ("Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman, Bibliography, vol. 1, p. 492). This document deals with discussions on standardization and improvement of yeast plants. Provisions are made for expansion of the separating procedure. Changes with regard to the drying and cooling equipment are discussed. Particular attention is paid to preparations for the construction of three new yeast plants in Mannheim, Kostheim and Kelheim. A cost calculation and estimates on production figures are included. This report is in German and English.

PB L 7736-S24. YEAST plant. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Nov 1943. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00
This is a supplement to PB 7736 ("Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman, Bibliography, vol. 1, p. 492). This is a calculation for a continuous yeast production of 1000 tons per year (93% dry) from beech wood sulfite waste liquor, covering 330 days. In German and English.

PB L 7736-S25. GADE and BAUMACH. Expansion of the Mannheim yeast plant to 12600 tons per year with a production of 200 tons of rayon pulp per day. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) n. d. 42 p. Price: Microfilm-$1.00 - Photostat-$3.00
Supplement to a report by Locke, Saeman and Dickerman on "Production of wood sugar in Germany and its conversion to yeast and alcohol," Bibliography, vol. 1, p. 492. A detailed calculation is given with regard to the production of an expanded plant as specified above. This calculation covers the following stages of the process: Extraction of the sulfite waste liquor; separation of sugar; production of yeast; pretreatment of waste liquor; cooling of the pretreated liquor; fermentation; total power requirement of the yeast plant; steam consumption; and water requirement. In German and English. Two diagrammatic drawings are included.

PB L 7736-S26. BAU. Material used and prices thereof for beech cellulose yeast plant (1000 t. per year). (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Jun 1943. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00
Supplement to a report by Locke, Saeman and Dickerman on "Production of wood sugar in Germany and its conversion to yeast and alcohol," Bibliography, vol. 1, p. 492. This is a list of equipment used in a standard yeast plant, including weight figures for the individual parts (specifying the ferrous and non-ferrous components) and their prices. In German and English.

PB L 7736-827. RIECHE. Production of yeast. Preliminary calculation for a plant for 6000 t. per year. I. G. Wolfen. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Sep 1942. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

Supplement to PB 7736: "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman, Bibliography, vol. 1, p. 492. Calculations of yeast production were made for the following combinations of equipment. The process was carried out with (1) 2 separators, cell filter, and rotating drier; (2) 2 separators, cell filter, preliminary evaporator and rotating drier; (3) 3 separators, preliminary evaporator and rotating drier; (4) 1 separator, washing cell filter and rotating drier; and (5) 1 separator, washing cell filter, preliminary evaporator and rotating drier. The operational results were compared as to yield of yeast, and consumption of steam, power and water. Data are given in detail. In German.

PB L 7736-828. HEFEFABRIK, KELHEIM, GERMANY. Several diagrams of yeast plant projects. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Jan 1942. 76 p. Price: Microfilm-$2.00 - Photostat-$6.00

Supplement to a report by Locke, Saeman and Dickerman on "Production of wood sugar in Germany and its conversion to yeast and alcohol," Bibliography, vol. 1, p. 492. This is a collection of technical drawings. They represent (1) a view from above of one section of the yeast plant Kehlheim; (2) a view from above of another section of this plant; (3) the layout of the street floor and of the top floor of this plant, both seen from above; (4) the outline of the entire yeast plant Kostheim (view from above); (5) the outline of the same plant in a cross-sectional view. Reproductions will suffer by the fact that the originals are colored. In German.

PB L 7736-829. TECHNISCHES BÜRO PERCOLA G.M.B.H., MUNICH, GERMANY. Diagrams of technical appliances. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Sep 1943. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

These are diagrams of several devices used chiefly in the production of yeast (supplement to PB 7736: "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman, Bibliography, vol. 1, p. 492). In German.

PB L 7736-830. KIRO, IRENE (tr.). Control of fermentation by the determination of the respiratory quotient - formed CO_2/used up O_2. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Jun 1942. 25 p. Price: Microfilm-$1.00 - Photostat-$2.00

This paper is a supplement to the report "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman (Bibliography, vol. 1, p. 492). The respiratory quotient of yeast during fermentation was studied on a series of cases. It ranged from 1.04 to 1.33. A low quotient was an indication of a good yield of yeast, low heat of reaction, satisfactory utilization of the sugar, and a short vegetation time. In the case of a high respiratory quotient all data were reversed. A table and graph are included. The report is in German and English.

PB L 7736-831. LUDEWIG, H. The plan and build-up of the fodder yeast plant at Dessau. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Sep 1941. 72 p. Price: Microfilm-$2.00 - Photostat-$5.00

Supplement to a report by Locke, Saeman, and Dickerman, entitled "Production of wood sugar in Germany and its conversion to yeast and alcohol," Bibliography, vol. 1, p. 492. This is a lecture on the making of fodder yeast by a modification of the Delbrück process. After discussing aeration experiments in the German yeast industry, the method of operation used in the yeast plant at Dessau is outlined. The refrigeration plant, and the equipment and operation of the automatic fermenters are explained in detail. The requirement in raw materials as well as the supply of current, water, compressed air, and the steam consumption are discussed. Yield and production cost figures are given in a table. A report on business transactions, purchase of equipment and raw material and sales of yeast including exact figures is appended. Flow sheets, photographs and diagrams relating to plant construction, operation and production are included. A separate flow sheet is explained in detail by a report, entitled "Description of food yeast plant." This report and the above lecture are both in German and English.

PB L 7736-832. RAMESOHL & SCHMIDT A. G., OELDE, GERMANY. Directions for the use of "Westphalia yeast separator." (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Jan 1942. 23 p. Price: Microfilm-$1.00 - Photostat-$2.00

This is a supplement to a report by Locke, Saeman and Dickerman on the "Production of wood sugar in Germany and its conversion to yeast and alcohol" (Bibliography, vol. 1, p. 492). It is a folder giving information about the construction and use of the appliance specified in the title. Several photographs and drawings serve to illustrate details of the apparatus such as: the connection part used for the gyratory material, the frame, the vertical machine parts of the drive, the transversal shaft, and the mounting of the apparatus. A chart showing a diagram of the yeast separator in Kostheim is attached. In German.

PB L 7736-833. SAEMON, J. Inspection of the yeast plant in Wolfen. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Feb 1942. 10 p. Price: Microfilm-$1.00 - Photostat-$1.00

This is a supplement to PB 7736 ("Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman, Bibliography, vol. 1, p. 492). It is a report of a visit of the above plant. The plant is a modification of the original "Scholler plant." Construction and operation are explained in detail and attention is called to the changes made in comparison with the "Scholler plant." Of particular importance is the good quality of the foam in this process, which is based on vinasse as starting material. A colored flow sheet is attached. In German and English.

PB L 7736-834. DÖRR, R. E. Interesting problems in the field of cellulose and cellulose wool industry. (Supplement to PB 7736) (FIAT Final Rept 499, Supp) Dec 1941. 25 p. Price: Microfilm-$1.00 - Photostat-$2.00

This report is a supplement to a document entitled "Production of wood sugar in Germany and its conversion to yeast and alcohol" by Locke, Saeman and Dickerman (Bibliography, vol. 1, p. 492). It discusses the utilization of raw materials such as pine wood waste materials and straw. The process for the production of cellulose from these raw materials is explained. Attention is called to the importance of the prehydrolysis of the cellulose for purification and to the fact that the pentoses, obtained as byproducts thereof, are fermented to yeast with the help of Torula utilis ("biological synthesis of protein"). Also the importance of lignin as a starting product for valuable substances is stressed. The second part of this document discusses how and to what extent the chemicals used as auxiliary media in cellulose production can be reutilized for industrial purposes. Flow sheets, diagrams and photographs illustrate the text. In German.

INSTRUMENTS (PROFESSIONAL, SCIENTIFIC AND CONTROLLING)

*PB L 81687. BRITISH INTELLIGENCE OBJECTIVES SUB-COMMITTEE. Interrogation of Carl Evers. (Interrogation Rept 549). Aug 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

He was concerned particularly with the production of autopilot equipment for V. 1, H. S. 293, F(X) and X.4. He could add very little to the existing knowledge of this equipment.

PB L 81753. CAMPBELL, ROBERT L. Flame attack study VIII: An instrument for the continuous recording of the direction and velocity of winds of low speeds. (CWS Medical Div Rept 115). Jun 1947. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00
Reports the development of the Micro Wind Indicator, a portable instrument for recording the velocity and direction of winds of low speed. Diagram and charts are attached.

PB L 85405. ELECTRO-MECHANICAL RESEARCH, INC. Film-type bolometers. (Period covered: Feb 1, 1943-May 31, 1945). (OSRD Rept 5530; NDRC 5.5 Rept 19). Aug 1945. 87 p. Price: Microfilm-$3.00 - Photostat-$9.00
In this report, Section I starts with a description of glass-cased bolometers made in 1942. These units were fairly sensitive and rugged but were too large. The first metal-cased unit, Type E, were considerably smaller and were quite satisfactory for operation in ordinary temperature. Still smaller units followed; Type F, only one-half inch in diameter, was used extensively in field work. Section II is devoted to the Type C bolometer and describes the methods and apparatus used in its construction and testing. A discussion of the gold-black used in this model is also given. Section III describes the results of miscellaneous studies on film-type bolometers. This includes notes on units made of metals other than gold, a discussion of the condenser bolometer, and the effects of gas-filling on sensitivity. Charts, photographs, and graphs are included.

PB L 85389. FLOOD, MERRILL M. Comparative test of coincidence and stereoscopic height-finders. (OSRD Rept 1129; NDRC D-2 Rept 1A-13, Rept to the Services 42) Oct 1942. 24 p. Price: Microfilm-$1.50 - Photostat-$3.00
The results presented were obtained by a comparative test using skilled British observers on the coincidence instruments and skilled American observers on the stereoscopic instrument, at the Coast Artillery School, Fort Monroe, Virginia.

PB L 85678. GUYOT, E. The problem of the hour: The keeping of the hour chronometers. (Accurate Translation Service Rept 46). n. d. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
The following influences are considered: (a) atmospheric pressure, (b) shocks, (c) magnetic field, (d) lack of isochronism, (e) defects of the dial, and (f) eccentricity error. Translated from the French.

PB L 85256. RAMBERG, WALTER. Examination and tests of Briviskop 187.5 hardness testing machine. (Lab. no. 65202-1). May 1947. 14 p. Price: Microfilm-$1.25 - Photostat-$2.00
The Briviskop 187.5 is an indentation hardness testing machine in which the indenting load is applied by a spring. The indentation in the specimen is magnified by a built-in microscope and the image projected on the ground glass screen of a micrometer measuring head. The machine is equipped with interchangeable ball indenters having diameters of 5, 2.5, 1.25, and 0.625 millimeters. A 136° diamond pyramid indenter is also provided. Loads from 20 kg to 187.5 kg may be applied on the high scale range. The machine has a multiple section spring system such that a part of the spring load may be removed from the indenting mechanism by a screw jack to provide a low scale range for loads from 0.997 kg to 15.6 kg. Special load settings are provided such that loads having ratios of 30, 10, 5, and 2.5 kg/mm^2 to the square of the ball diameter may be applied. In addition load settings are provided for loads commonly used with the 136° diamond pyramid indenter. Figs 1 and 2 side views, Fig. 3 shows the high and low load scales and a table giving combinations of indenting loads and ball sizes, Fig. 4 schematic drawing, and Fig. 5 ground glass scale and micrometer screw.

PB L 81679. ROBBINS, CHARLES. 20 and 200 gram-capacity Sartorius analytical balances, submitted to the Waltham Watch Co. for assessment by the Office of Technical Services, Department of Commerce. Jun 1947. 21 p. Price: Microfilm-$1.50 - Photostat-$3.00
Balance, Sartorius, Projection Reading, micro-analytical, capacity 20 grams, sensitivity 0.01 milligram per division - This German manufactured balance has been designed for rapid micro-weighings in the analytical laboratory. Weights ranging from 10 to 90 mgm. hang from arms inside the balance case. A round dial outside the case indicates the weights which have been added to the pan. The pointer is brought to rest rapidly by means of air dash-pots which hang from the ends of each balance-arm and the true rest point is indicated on an illuminated screen. This balance is well suited for the needs of the micro-analytical laboratory. It is also particularly favorable for the weight inspection of all types of watch, balance-wheel screws, because of the ease with which the pans are loaded and the rapid manipulation of the fractional weights. Photographs of this balance are appended. Balance, Sartorius, Projection Reading, analytical, capacity 200 grams, sensitivity 1 mgm. per division - This German manufactured balance has been designed for rapid and accurate weighings in the analytical laboratory. 199.99 grams of weights hang from arms inside the balance case and the dials A, B, C outside the case indicate the weights which have been added to the pan. The pointer is brought to rest quickly by means of air dash-pots which hang from the ends of each balance-arm. This balance is well suited for the needs of industrial and research laboratories, and in the shop where the precise weights of small instrument parts are required. Photograph and sketch of the optical system are appended..

PB L 86014. U. S. BUREAU OF ORDNANCE. Film scoring viewer Mark 1 and angle solver Mark 10. (Ordnance Pamphlet 1149; NAVAER Rept 10-20-502). Sep 1944. 38 p. Price: Microfilm-$1.75 - Photostat-$4.00
Part 1 - Film scoring viewer MK1- is a portable 16-mm film projector measuring approximately 14.5 in. x 16.5 in. It weighs 48 lbs. The unit is air-cooled and operates on a 110-volt to 120-volt direct or alternating current. The projector is used to view and analyze films of aerial gunnery recorded by a gun camera. These analyses show the fighter pilot in training - how his shooting - why he missed. His marksmanship may be approximately evaluated by visual inspection of his film records or more accurately scored by using mathematical equations. The solutions of these formulae are quickly provided by the angle solver MK10, which is described in Part 2 of this pamphlet. Operation and maintenance directions are given.

PB L 86273. U. S. STRATEGIC BOMBING SURVEY. EQUIPMENT DIVISION. Optical and precision instrument industry report. Aug 1945. 181 p. Price: Microfilm-$5.50 - Photostat-$19.00
The optical and precision instrument industry, as considered in this report, involves two distinct manufacturing processes. First, the manufacture of optical glass, and secondly, the fabrication of scientific and precision instruments, most of which use this glass. This report is based on a study of the German ministerial control of the industry and a detailed field survey of the industry and a detailed field survey of the main works of Carl Zeiss in Jena, Ernst Leitz in Wetzlar, the Schott Glass Works in Jena, and appropriate investigations of 15 smaller plants. Exhibit B - individual plant reports have been prepared as follows: Carl Zeiss, Jena (reference O-1), Ernst Leitz, Wetzlar (reference O-2), Schott glass works, Jena (reference O-3) Summary reports on 15 optical and precision instrument plants (reference O-4). For report on the film industry in Germany refer to exhibit A. Photographs, diagrams and drawings are included.

PB L 86117. WATSON, R. B. Acoustic marine speedometer. Apr 1944. 34 p. Price: Microfilm-$1.75 - Photostat-$4.00

Instruments (contd)

This report describes comprehensively the work done on the Acoustic Marine Speedometer by the Harvard Underwater Sound Laboratory. In the course of this development the following three types of such speedometers were investigated: 1) The Steady-state Acoustic Marine Speedometer (SAMS), operation of which depends on the Doppler shift of sound which is transmitted by one transducer and received by another after having been scattered by the water; 2) The Acoustic Marine Pinging Speedometer (AMPS), which operates in a manner similar to the SAMS except that a single transducer is employed; 3) The Phase Acoustic Marine Speedometer (PAMS), which uses two transducers but depends for its operation on a phase lag rather than on Doppler shift. This report covers the theoretical background, description of equipment, and results obtained for each of the three approaches to the problem. Because of the press of other investigations, work on the AMS project has been suspended at this Laboratory. Since it is possible that the speedometer investigations might be resumed at some later time, however, certain proposals for future work on the problem have been included at the end of this report. This work was performed for the National Defense Research Committee under Contract OEMsr-287 with Harvard University.

MEDICAL RESEARCH AND PRACTICE, INCLUDING CLINICAL APPLICATION OF DRUGS AND PHARMACEUTICALS

PB M 74066. BAUER, K. H. Treatises on medical subjects. (FIAT Microfilm Reel CC 289, Frames 1-23) 1942-1943. 23 f. Price: Microfilm-$1.00 - Enlargement print-$2.50

The material of this FIAT microfilm reel was collected in the library of Heidelberg University. Individual items are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1-6 PB M 74066	Bone marrow nailing or wire extension? Contribution to bone marrow nailing under special conditions, such as pseudoarthrosis, repeated fracture, osteotomy with shortening of the bone. 1943. In German.	$1.50
7-17 PB M 74066	General war surgery of the extremities. 1942. In German.	1.50
18-23 PB M 74066	Sport activities for the injured and ailing, as seen from the surgical viewpoint. 1943. In German.	1.50

PB M 73795. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C 212, Frames 4786-5726). 1939. 941 f. Price: Microfilm-$6.00 - Enlargement Print-$94.50.

56 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
4786 - 4799 PB M 73795	Differential diagnosis between pulmonary cancer and pulmonary abscess. By Wilhelm Peters. May 1939. In German.	1.50
4800 - 4813 PB M 73795	Neurogenic effects in the origin of acute necrosis of the pancreas. By W. Pfannkuch. Sep 1939. In German.	1.50
4814 - 4825 PB M 73796	Serial investigations on the effect of casein and gelatin, being the protein component of mixed diets, on the glycogen content of the liver. By E. Pfister. Jan 1939. In German.	1.50
4826 - 4841 PB M 73795	Clinical twin births. By E. Philipp. Mar 1939. In German.	2.00
4842 - 4849 PB M 73795	Experiments on the influence of different quantities of the same protein (casein) in a mixed diet, on the content of glycogen in liver and on the metabolism. By Ernst Pirl. Sep 1939. In German.	1.50
4850 - 4865 PB M 73795	Hernia foraminis Winslowi. By E.F. Poll. Mar 1939. In German.	2.00
4866 - 4886 PB M 73795	The excretory function of the lungs. By P.F. Ponath. Feb 1939. In German.	2.50
4887 - 4906 PB M 73795	The possibility of proving blood-relationship (paternity) on the ground of anomalies of tooth position and jaw deformities. By H. Porzig. Jun 1939. In German.	2.00
4907 - 4924 PB M 73795	Constitutional therapy and recreation in a health resort in cases of developmental disorders. By K. Pulvermüller. 1939. In German.	2.00
4925 - 4931 PB M 73795	Interrelation between thrombosis of the sural veins and the "architecture" of the calf. By Rita Putzer, geb. Fricke. Oct 1939. In German.	1.50
4932 - 4941 PB M 73795	The problem of congenital malaria. By H. Quednau. May 1939. In German.	1.50
4942 - 4957 PB M 73795	Projectiles and projectile splinters in the human body that are difficult to locate. By E. Quirin. Sep 1939. In German.	2.00
4958 - 4970 PB M 73795	Investigations on the growth of tubercle bacteria in synthetic nutrient solutions, carried out with the fluorescence microscope. By Abdul Rahim. Oct 1939. In German.	1.50
4971 - 4985 PB M 73795	"Antefixation" delivery after preceding operations on the uterus for the correction of retrodeviation. By Wolfgang Ranft. Feb 1939. In German.	1.50
4986 - 5006 PB M 73795	Multiple malignant primary tumors. By E. Reichwein. Aug 1939. In German.	2.50
5007 - 5041 PB M 73795	Care of health among soldiers through food control by veterinarians in the German armed forces and in the armed forces of various civilized countries. By R. Reinecke. Nov 1939. In German.	3.50
5042 - 5051 PB M 73795	Eye diseases of new born infants with special consideration of ophthalmoblennorrhea. By G. Respondek. Jan 1939. In German.	1.50
5052 - 5060 PB M 73795	Detection of tubercle bacteria in the sputum, by means of the fluorescence microscope.	

By Mehdi Rez-Nour. Oct 1939.
In German. 1.50

5061 - 5092
PB M 73795
Fracture of the capitulum radii.
By Eugen Richter. Dec 1939.
In German. 3.50

5093 - 5115
PB M 73795
Relationship between hormones and vitamins on the one hand and pulmonary tuberculosis on the other hand. By Georg Richter.
Nov 1939. In German. 2.50

5116 - 5130
PB M 73795
X-ray diagnosis of the intra-uterine development of the skeleton. By Hans Richter.
Jan 1939. In German. 1.50

5131 - 5139
PB M 73795
Unspecific therapy of epidemic meningitis. By Ingrid von Rieben.
Dec 1939. In German. 1.50

5140 - 5149
PB M 73795
"Glossitis mediana rhombica".
By Georg Rieck. Apr 1939.
In German. 1.50

5150 - 5171
PB M 73795
Pseudo-anemia in school age.
By Maria Riedel.
Sep 1939. In German. 2.50

5172 - 5194
PB M 73795
The contribution of dentistry to the development of local anesthesia in the 19th century.
By Kurt Rieh. May 1939.
In German. 2.50

5195 - 5203
PB M 73795
Clinical experience with a new chemotherapeutic in the treatment of pneumonia.
By Kurt Riehn. Oct 1939.
In German. 1.50

5204 - 5215
PB M 73795
Differences in measurable characteristics of twins, as compared with the corresponding differences found in the population.
By Hans Riemann. Jan 1939.
In German. 1.50

5216 - 5239
PB M 73795
External application of cod-liver oil. By H.-J. Rietz.
Mar 1939. In German. 2.50

5240 - 5251
PB M 73795
Post-examination of schizophrenics whose disease was of puerperal origin, regarding the prognosis of the disease. By R. Roesen.
Jul 1939. In German. 1.50

5252 - 5263
PB M 73795
Hyperthyroidism resulting from use of iodine. By G. Rosenfeld.
Aug 1939. In German. 1.50

5264 - 5286
PB M 73795
To the question of combined suicide.
By N. Roth. Oct 1939.
In German. 2.50

5287 - 5295
PB M 73795
The obstructed kidney.
By W. Rottgardt. 1939.
In German. $1.50

5296 - 5308
PB M 73795
Effect of milk protein on the secretion of gastric juice.
By R. Rütz. Mar 1939.
In German. 1.50

5309 - 5319
PB M 73795
The influence of cold on carbohydrate metabolism.
By Konstantin Samaras.
Apr 1939. In German. 1.50

5320 - 5329
PB M 73795
Influence of pyramidone on the carbohydrate balance in diabetes mellitus of man.
By Hans Sarkander. Jul 1939.
In German. 1.50

5330 - 5361
PB M 73795
Comparative morphological studies on spermatozoa of tuberculous bulls, in consideration of spermiogenesis.
By Heinz-Günther Sassenhagen.
Mar 1939. In German. 3.50

5362 - 5382
PB M 73795
The influence of the female sex hormone on the vascular system of the skin, when applied percutaneously. By W. Sausse.
Jul 1939. In German. 2.50

5383 - 5398
PB M 73795
Dermatomyositis.
H. Schaefer. Jan 1939.
In German. 2.00

5399 - 5406
PB M 73795
Investigations on percutaneous absorption of vitamin B1.
By K.R. Schäfer. Apr 1939.
In German. 1.50

5407 - 5501
PB M 73795
Frequency of caries in various districts of Germany.
By Karl-Heinz Schalla.
Sep 1939. In German. 9.50

5502 - 5512
PB M 73795
Provocative irritation of tonsils suspected of carrying foci of infection, by short wave irradiation. By R. Schalm.
Sep 1939. In German. 1.50

5513 - 5525
PB M 73795
Serial investigations regarding the diagnosis of gonorrhoic infections of the rectum in women. By Th. Schaper.
Nov 1939. In German. 1.50

5526 - 5540
PB M 73795
On the symptomatology of tabes dorsalis as judged by hereditary and constitutional examinations.
By Karl Schatter. 1939.
In German. 1.50

5541 - 5566
PB M 73795
Internal strangulations of abdominal organs. By E. Schaumberger.
Aug 1939. In German. 3.00

5567
PB M 73795
This frame is missing.

5568 - 5599
PB M 73795
The title page is missing. According to the text, the subject is: Vital amputation of the pulp as a method of root treatment. By Scheffer. 1939.
In German. 3.50

5600 - 5610
PB M 73795
The compensation state of heart defects during and after delivery. Contribution to the problem of the prognosis.
By R. Scheibner. 1939.
In German. 1.50

5611 - 5624
PB M 73795
Changes in the size of the liver following exertions through sports. By Franz Scheidler.
1939. In German. 1.50

5625 - 5635
PB M 73795
Aspiration pneumonia in people rescued from death by drowning.
By A. Scheiffler.
Sep 1939. In German. 1.50

5636 - 5643
PB M 73795
Bone injuries due to overstrain in wound men (March fractures)
By Fr. Scheller. Oct 1939.
In German. 1.50

5644 - 5655
PB M 73795
Contributions to the features of Hoffa's disease. By R. Schemann.
Jul 1939. In German. 1.50

5656 - 5666
PB M 73795
Continuation of statistic investigations on cases of lichen ruber planus. By Tscheng-yuan Scheng.
n.d. In German. 1.50

5667 - 5677 PB M 73795 Disturbances of the biological equilibrium in the dental system as a cause of localized paradentosis. By Schibalski. Oct 1939. In German. 1.50

5678 - 5694 PB M 73795 Osteitis fibrosa and differential diagnosis from sarcoma. By Alfred Schickel. Jul 1939. In German. 2.00

5695 - 5710 PB M 73795 Effect of sodium chloride solutions on the spinal cord of the frog. By Werner Schierig. Nov 1939. In German. 2.00

5711 - 5726 PB M 73795 Vaginal cesarean section and its results. By F.M.Schiering. Jul 1939. In German. 2.00

PB M 73797. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Reel C 219, Frames 940-1864). 1934-1939. 925 f. Price: Microfilm-$6.00 - Enlargement Print-$92.50. 51 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
940 - 975 PB M 73797	The population movement in the city of Bonn after World War I. By Gerta Kruse. Jun 29, 1938. In German.	$4.00
976 - 1000 PB M 73797	Clinical, histopathological and heredo-biological investigations on a case of the late infantile form of amaurotic idiocy. By Paul Küpper. Jan 15, 1938. In German.	2.50
1001 - 1011 PB M 73797	Regeneration of nerves in dental granuloma. By Helmut Kuhn. Dec 7, 1938. In German.	1.50
1012 - 1029 PB M 73797	Arteriosclerotic changes in the aorta, coronary and peripheral vessels in healthy persons and in diabetics. By Leopold Lanser. Mar 1938. In German.	2.00
1030 - 1052 PB M 73797	Blood transfusions in the surgical department of the Bonn university hospital. By Hans Lemmerz. Sep 21, 1939. In German.	2.50
1053 - 1069 PB M 73797	The non-pathogenic bacteria in human feces, with special consideration of atypical strains of B. coli and of Nissl's B coli index. By Erna Elisabeth Lenz. Nov 20, 1937. In German.	2.00
1070 - 1091 PB M 73797	The present state of the problem of pycnolepsy. By Leni Ley. Nov 3, 1937. In German.	2.50
1092 - 1123 PB M 73797	Inbreeding in the district of Ahrweiler. By Friedrich Wilhelm Loh. Nov 21, 1938. In German.	3.50
1124 - 1139 PB M 73797	Thyroid gland disorders and changes in the skeleton as seen in X-ray pictures. By Karl Heinz Lueg. Feb 15, 1938. In German.	2.00
1140 - 1155 PB M 73797	The dependance of the properties of the silicates for dental purposes on the viscosity of the acid. By Ludwig Lummer. Mar 31, 1939. In German.	2.00
1156 - 1167 PB M 73797	Are growth and development hindered by hypertrophy of the tonsils? By Elmar Macke. Nov 15, 1937. In German.	1.50
1168 - 1184 PB M 73797	The problem of dental care for people carrying social insurance in Yugoslavia. By Stefan Mandl. Sep 19, 1938. In German.	2.00
1185 - 1200 PB M 73797	Child mortality in Westphalia caused by scarlet fever, measles, diphtheria, and whooping cough. (1885 - 1914). By Hanni Martens. May 3, 1938. In German.	2.00
1201 - 1219 PB M 73797	The dependence of bursitis prepatellaris on accidents. By Erich Maurer. Dec 16, 1938. In German.	2.00
1220 - 1237 PB M 73797	Heterotropic occurrence of lymph nodules; their histogenesis and functional significance. By Charlotte Melches. Aug 5, 1937. In German.	2.00
1238 - 1247 PB M 73797	The mechanism of action of potassium chlorate in white mice under normal and acid conditions of metabolism. By Fritz Metternich. Jun 19, 1939. In German.	1.50
1248 - 1264 PB M 73797	Excretion of gonadotropic hormones after administration of prolan. By Aenne Millard. Dec 14, 1937. In German.	2.00
1265 - 1281 PB M 73797	The influence of phenylurethane anesthesia on the solubility of proteins in the isolated frog muscle. By Georg Mönninghoff. Jun 24, 1938. In German.	2.00
1282 - 1303 PB M 73797	Investigations on the blood depots of man. By Werner Molineus. Nov 17, 1938. In German.	2.50
1304 - 1315 PB M 73797	The influence of ultraviolet rays on human blood. By Hermann Moormann. Sep 21, 1939. In German.	1.50
1316 - 1348 PB M 73797	Formation of renal calculi after bone fractures. By Werner Mühlig. Apr 22, 1938. In German.	3.50
1349 - 1364 PB M 73797	Investigations on the flow of amalgams in dependance on their silver- or tin content. By Hans Müller. Mar 14, 1939. In German.	2.00
1365 - 1387 PB M 73797	The behavior of glucose tolerance curves in people suffering from hypertension. By Hermann Müller. Jun 14, 1938. In German.	2.50
1388 - 1405 PB M 73797	Treatment of tubercular pleural empyema. By Wilhelm Müller. Nov 22, 1937. In German.	2.00
1406 - 1423 PB M 73797	The respiration of patients suffering from Graves disease. By Erich Mundt. Feb 16, 1939. In German.	2.00
1424 - 1437 PB M 73797	To what extent do tuberculous seroreactions promote and facilitate the clinical diagnosis of tuberculosis? By Heinrich Muth. Dec 3, 1937. In German.	1.50
1438 - 1448 PB M 73797	Investigations into the respiratory arrhythmia of patients with a labile circulatory system. By Paul Neuking. Dec 12, 1938. In German.	1.50

1449 - 1495 PB M 73797 — Critical review of the work on the treatment of gastric and duodenal ulcers with diet, sounds, hormones, and irradiations. By Leonhard Heinrich Neumann. Apr 11, 1939. In German. 5.00

1496 - 1502 PB M 73797 — The problem of the solubility and stability of crystalline insulin "Bonn". By Heinz-Ulrich Neumann-Kleinpaul. Dec 15, 1937. In German. 1.50

1503 - 1514 PB M 73797 — Industrial injuries. Dental caries and cutaneous eczemata in bakers and butchers, their cause and prevention. By Paul Niessen. Oct 6, 1939. In German. 1.50

1515 - 1525 PB M 73797 — Antagonistic behavior of different strains of B.coli towards streptococci and typhoid fever bacilli. By Karl Nitsche. Dec 28, 1937. In German. 1.50

1526 - 1549 PB M 73797 — Thallium poisonings and alopecia, and the relationship between thallium and the endocrine-sympathetic system. By Friedrich Nonnenbroich. 1939. In German. 2.50

1550 - 1560 PB M 73797 — The margin of variation of the type index in individual healthy persons. By Fritz Karl Dehm. Nov 19, 1937. In German. 1.50

1561 - 1580 PB M 73797 — Synopis of subjective and objective gastric symptoms in cases of gastric and duodenal ulcers. By Elisabeth Offermann. May 25, 1938. In German. 2.00

1581 - 1592 PB M 73797 — The alleged injuries of treatment with pyramidone. By Edith Oster. Nov 11, 1937. In German. 1.50

1593 - 1611 PB M 73797 — A case of sympathogonioma of the adrenals. By Hans Joachim Otten. Nov 15, 1937. In German. 2.00

1612 - 1618 PB M 73797 — Investigations on the number of thrombocytes in persons of advanced age. By Gertrud Ottowess. Jun 10, 1939. In German. 1.50

1619 - 1651 PB M 73797 — Malacia of the os lunatum. By Gottfried Pattberg. Jul 29, 1939. In German. 3.50

1652 - 1673 PB M 73797 — Is it possible to prescribe a low cost salt-free diet for people receiving public relief? It is necessary to raise the allowance and by how much? By Clare Pfeiffer. Dec 15, 1938. In German. 2.50

1674 - 1680 PB M 73797 — The saturated sterols of ox bile. By Rudolf Pertzborn. Dec 6, 1938. In German. 1.50

1681 - 1692 PB M 73797 — The behavior of blood sugar after small doses of glucose. By Lucy Petermann. Nov 9, 1937. In German. 1.50

1693 - 1704 PB M 73797 — Lochial congestion and its treatment. By Otto Peters. Jan 16, 1939. In German. 1.50

1705 - 1719 PB M 73797 — Pathologic - anatomical and bacteriological findings in carriers of typhoid and paratyphoid bacilli. By Herbert Pfau. Feb 2, 1939. In German. 1.50

1720 - 1734 PB M 73797 — The club-foot, its origin, hereditary transmission, and relation to the law for the prevention of progeny carrying hereditary diseases. By Theo Phitz. May 27, 1938. In German. 1.50

1735 - 1753 PB M 73797 — Contribution to the knowledge of malignant nevus-born skin tumors in younger patients. By Wilhelm Ploanes. Jul 4, 1939. In German. 2.00

1754 - 1774 PB M 73797 — The most important methods of supporting treatment in paradentosis, with special consideration of splint treatment. By Ulf Posselt. Jul 10, 1937. In German. 2.50

1775 - 1784 PB M 73797 — Experimental investigations on oleothorax. By Heinz Prinz. Dec 11, 1937. In German. 1.50

1785 - 1796 PB M 73797 — Investigations on the type of external respiration under the influence of "Emphysemon". By Elisabeth Quodbach. Oct 16, 1938. In German. 1.50

1797 - 1808 PB M 73797 — Takata's flocculation test and the ovulation term. By Hermann Reimer. Dec 20, 1938. In German. 1.50

1809 - 1834 PB M 73797 — Peritonitis of renal origin. By Heinz Rohker. Nov 9, 1934. In Germah. 3.00

1835 - 1864 PB M 73797 — Significance of blood transfusion for the treatment of puerperal fever. By Heinz Reitz. Oct 19, 1938. In German. 3.00

PB M 74083. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctor's theses. (FIAT Microfilm Reel G-234, Frames 5561-6562) 1936-1939. 965 f. Price: Microfilm-$6.00 - Enlargement print-$96.50. The individual items of this FIAT microfilm reel are listed below. It contains 64 doctors' theses from the Medical Faculty of Breslau University. They will be available as enlargement prints. Please give the above PB number and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
5561-5571 PB M 74083	The antagonistic effect of some types of bacteria on diphtheria bacilli. By G. Müller. 1939. In German.	$1.50
5572-5584 PB M 74083	Investigations on saponin- and saponin-collargol-anemia in rabbits and its effect on the tonsils. By L. Müller. 1939. In German.	1.50
5585-5604 PB M 74083	Contribution to the treatment of gastric and duodenal ulcers with sex hormones. By F. Mutke. 1939. In German.	2.00
5605-5622 PB M 74083	Causistic contribution to the psychology of the pathologic swindler. By W. Nacke. 1938. In German.	2.00
5623-5637 PB M 74083	Is actinomycosis identical with streptotrichosis? By H. Nagel. 1939. In German.	1.50
5638-5647 PB M 74083	Effect of blood transfusion on the osmotic resistance in children. By F.-J. Nave. 1939. In German.	1.50

5648-5663 PB M 74083 — Contribution to the problem of the surgical treatment of functionally troublesome exophthalmos which was unsuccessfully treated with conservative methods. By H. Hoffgen. 1939. In German. 2.00

5664-5673 PB M 74083 — Cure of vaginouterine prolapse by transplantation of levine fascia according to Schubert. By H. Hopel. 1939. In German. 1.50

5674-5684 PB M 74083 — Lichen ruber of the mucous membranes. By G. Riesner. 1938. In German. 1.50

5685-5703 PB M 74083 — Contribution to the symptomatology and surgery of cystic kidneys. By K. Norden. 1939. In German. 1.50

5704-5719 PB M 74083 — Changes of the foot during growth. By P. Nowak. 1939. In German. 2.00

5720-5732 PB M 74083 — Blood pattern and prognosis in cases of cancer of the uterine cervix treated by irradiation. Examination of 150 females afflicted with cancer. By H. -G. Ober. 1939. In German. 1.50

5733-5742 PB M 74083 — Relationship between the propelling force and phase of motion during walking. By R. Ottawa. 1938. In German. 1.50

5743-5750 PB M 74083 — These frames numbers are missing.

5751-5762 PB M 74083 — Frequency of active tuberculosis of the hilus with coexisting active tuberculosis of the lung. By U. Otto. 1939. In German. 1.50

5763-5780 PB M 74083 — Effect of iron vitriol on diuretics, excretion of uric acid and hemopoesis. By P. Paritz. 1939. In German. 2.00

5781-5809 PB M 74083 — These frames numbers are missing.

5810-5831 PB M 74083 — Experiences with Stoffel's operation in cases of spastic paralysis. By G. Patas. 1939. In German. 2.50

5832-5845 PB M 74083 — Contribution to the knowledge of extraarticular arthrodesis. By P. Patas. 1939. In German. 1.50

5846-5863 PB M 74083 — The frequency of meningitis cerebrospinalis epidemica in Breslau as compared with the frequency of this disease in the Ruhr district and in the German Reich during 1926-1936. By K. Pawlik. 1939. In German. 2.00

5864-5878 PB M 74083 — The applicability of Riddle's formula to cases of pernicious anemia observed at the medical ward of the Breslau university hospital. By V. Pelz. 1939. In German. 1.50

5879-5890 PB M 74083 — The spontaneous pigment epithelial cysts of the posterior surface of the iris. By E. Penzholz. 1939. In German. 1.50

5891-5907 PB M 74083 — Seasonal fluctuations of the vitamin C content, with special regard to the conditions in the army. By H. Peter. 1939. In German. 2.00

5908-5916 PB M 74083 — Relationship between Recklinghausen's disease, acromegalia and calcium metabolism, studied on the basis of an actual case. By K. Peters. 1939. In German. 2.00

5917-5934 PB M 74083 — Contribution to the problem of osteotomy as a treatment for inveterate congenital dislocation of the hip joint. By F. Pfaffenrath. 1939. In German. 2.00

5935-5950 PB M 74083 — Practical application of colloid phase buffering in serodiagnosis of tuberculosis. By A. Piechotta. 1938. In German. 2.00

5951-5964 PB M 74083 — To what extent can a relationship be established between the height of the center of gravity of the human body and skeletal points that are pre-formed anatomically? By W. Pietruschka. 1939. In German. 1.50

5965-5978 PB M 74083 — Carbon dioxide bath and electrocardiogram. By P. F. Pietsch. 1939. In German. 1.50

5979-5985 PB M 74083 — Indication for and results of institutional treatment of open tuberculosis of the lungs in childhood. By W. Pietsch. 1939. In German. 1.50

5986-6021 PB M 74083 — Observations on 27 cases of leukemia showing changes on the skin and mucous membranes. By E. Placzek. 1938. In German. 4.00

6022-6050 PB M 74083 — On a case of inflammatory (nyelonephritic) cystic kidney. By F. Pladeck. 1939. In German. 3.00

6051-6065 PB M 74083 — Herpes affections of the vulva. By E. Pohlmann. 1939. In German. 1.50

6066-6070 PB M 74083 — Bechterew's disease and its treatment. By H. Pohl. 1939. In German. 1.50

6071-6087 PB M 74083 — Symptomatology and pathophysiology of paroxysmal paralysis. By W. Priever. 1939. In German. 2.00

6088-6109 PB M 74083 — Investigations into the effect of open air restcures and airbaths in Germany's secondary mountain ranges on the gaseous metabolism, and observations on regional and climatic changes of the blood pattern. By H. Przemeck. 1939. In German. 2.50

6110-6124 PB M 74083 — Experiences with one-step resection of the colon with end-to-end suturing of the large intestine. By L. Przygode. 1939. In German. 1.50

6125-6134 PB M 74083 — Investigations on the prevention of lethal anaphylactic shock with ascorbic acid salts of iron. By K. Peiers. 1939. In German. 1.50

6135-6157 PB M 74083 — The sex instinct in mongoloid idiocy, with special regard to the possibility of propagation and to the law for the prevention of progeny carrying hereditary diseases. By H. Rachner. 1939. In German. 2.50

6158-6171 PB M 74083 — Growing together and fusion of teeth as well as twin formation in teeth.

By H. Rechenberger. 1939. In German. 1.50

6172-6200 PB M 74083 **Hereditary biology of hemophilia and its significance for the prevention of progeny carrying hereditary diseases.** By H. -H. Rehkopf. 1939. In German. 3.00

6201-6207 PB M 74083 **Effect of prontosil on the kidneys, tested in children suffering from scarlet fever.** By H. Remus. 1939. In German. 1.50

6208-6219 PB M 74083 **Late injuries to the heart following diphtheria.** By B. Renner. n.d. In German. 1.50

6220-6241 PB M 74083 **The curability of carcinoma solidum of mice by means of x-rays.** By K. Reuter. 1939. In German. 2.50

6242-6256 PB M 74083 **Experiments on rats used to caffeine, regarding the effect of caffeine on the excretion of minerals and the quantity of the urine.** By G. Richter. 1939. In German. 1.50

6257-6272 PB M 74083 **Success and failure of resection of the tip of the dental root.** By H. Riemay. 1939. In German. 2.00

6273-6285 PB M 74083 **Statistics on congenital syphilis, with special attention to the symptoms leading to diagnosis and to the age at the time of diagnosis.** By K. Rinke. 1939. In German. 1.50

6286-6304 PB M 74083 **The outcome of pancreatic cysts observed at the surgical ward of the Breslau university hospital in 1920-1938.** By E. Röder. 1939. In German. 2.00

6305-6330 PB M 74083 **On the problem of osteitis fibrosa localisata, with special consideration of surgical treatment with bone transplantation.** By A. Rücker. 1939. In German. 3.00

6331-6344 PB M 74083 **The cutaneous areas that are used for intended feeling.** By G. Ruehe. 1939. In German. 1.50

6345-6351 PB M 74083 **Paravertebral anesthesia and its application in cases of ureteral calculi.** By L. Schaffranek. 1937. In German. 1.50

6352-6370 PB M 74083 **Distribution of the strains of pneumococci in different diseases with special regard to affections of the upper air passages.** By M. von Schalscha-Ehrenfeld. 1939. In German. 2.00

6371-6379 PB M 74083 **The perpendicular force arising during locomotion of man.** By H. Schenk. 1939. In German. 1.50

6380-6397 PB M 74083 **Blood cell sedimentation rate in rheumatic diseases. Observations before and after treatment.** By M. -L. Schiefner. 1939. In German. 2.00

6398-6401 PB M 74083 **Chronaxie and course of normal muscular contraction.** By K. -H. Schiffer. 1938. In German. 1.50

6402-6419 PB M 74083 **The suitability of various culture media, particularly brilliant green phenol red agar, for establishing the diagnosis of typhoid and paratyphoid.** By E. Schindler. 1939. In German. 2.00

6420-6435 PB M 74083 **Ozone treatment of paradentosis.** By F. W. Schliebs. 1939. In German. 2.00

6436-6455 PB M 74083 **Changes in the blood pattern and blood sugar level, in cerebral commotion.** By H. -J. Schmidt-Riediger. 1936. In German. 2.00

6456-6469 PB M 74083 **The diagnostic value of doubtful serореactions for the detection of syphilis in pregnancy.** By B. Schneider. 1939. In German. 1.50

6470-6476 PB M 74083 **Investigations on the effect of vitamins on the structure of the thyroid, by measuring the cells.** By M. Schober. 1939. In German. 1.50

6477-6500 PB M 74083 **The fate of diabetics who contracted the disease in juvenile age, as observed since introduction of insulin and of liberal diet.** By E. Schonohl. 1939. In German. 2.50

6501-6521 PB M 74083 **Measurements of the heart in boys who are engaged in sports to a greater or lesser extent.** By H. W. Scholz-Stammer. 1939. In German. 2.50

6522-6534 PB M 74083 **The philosophy of life of adults affected with kyphoscoliosis.** By W. Schütte. 1939. In German. 1.50

6535-6550 PB M 74083 **Critical discussion of the outlook as to the healing of internal fractures of the neck of the femur by various methods of treatment.** By H. -W. Schulz. 1939. In German. 2.00

6551-6562 PB M 74083 **On changes of the blood cell sedimentation rate in preserved citrate blood, a method used for the diagnosis of malignant tumors and lymphogranulomatosis.** By B. Seidel. 1939. In German. 1.50

PB M 73877. **ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses.** (FIAT Microfilm Reel I-253, Frames 5066-5992) 1941-1942. 926 f. Price: Microfilm-$6.00 - Enlargement print-$93.00.
34 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Items	Price
5066-5095 PB M 73877	**Spontaneous expulsion of root-fragments through the nose with following spontaneous healing of chronic communications between antrum and mouth, and evaluation of this phenomenon.** By H. Schellenberger. n.d. In German.	$3.00
5096-5127 PB M 73877	**Study on the occurrence and familial frequency of palmar patterns and main lines in Franconian country villages.** By Franz Beckh. 1941. In German.	3.50
5128-5148 PB M 73877	**Management of premature rupture of the fetal membranes.** By Siegfried Haun. 1942. In German.	2.50
5149-5171 PB M 73877	**The birth-chair.** By Karl Mayer. 1942. In German.	2.50

5172-5194 PB M 73877 — These frames are identical with Frames 5149-5171. 2.50

5195-5224 PB M 73877 — The beginnings of the Erlangen Maternity Hospital. By Hans Meiler. 1941. In German. 3.00

5225-5236 PB M 73877 — A case of spontaneous rupture of the spleen following septic tonsillitis. By Carl Martin Ruck. 1941. In German. 1.50

5237-5266 PB M 73877 — Experience with the vitamin-C treatment of lobar pneumonia. By Wilhelm Alberter. n.d. In German. 3.00

5267-5295 PB M 73877 — Electrocardiograms after electric convulsion treatment. By Hildegard Schmidt. n.d. In German. 3.00

5296-5323 PB M 73877 — Position and movability of the diaphragm in males and females. By Ernst Bachmaier. n.d. In German. 3.00
May reproduce poorly.

5324-5381 PB M 73877 — Contribution to the differential diagnosis of pulmonary abscesses. By Fritz Baigger. n.d. In German. 6.00

5382-5419 PB M 73877 — Pathogenesis of the injuries at the level of the central nervous system following electrotrauma. By Leonhard Bauer. n.d. In German. 4.00

5420-5489 PB M 73877 — To what extent can treatment by natural remedies be applied in gynecology and obstetrics? By Engelbert Bicherl. n.d. In German. 7.00

5490-5512 PB M 73877 — Results of radical operation of the postoperative peptic ulcer of the jejunum. By Gertrud Blumlein. n.d. In German. 2.50

5513-5545 PB M 73877 — Pathogenesis and symptomatology of progressive muscular dystrophy. By Willi Brankel. n.d. In German. 3.50
May reproduct poorly.

5546-5565 PB M 73877 — The course of diphtheria in the city of Erlangen during the years 1920-1941. (With a report on the active protective inoculation campaign against diphtheria in 1940). By Max Dauer. n.d. In German. 2.00

5566-5644 PB M 73877 — The pathogenesis of the so-called "sciatica." By Martin Derks. n.d. In German. 8.00
Discussion of casuistic regarding its cases symptomatology and diagnosis.

5645-5684 PB M 73877 — The causes of premature rupture of the amnion and of the increasing occurrence of this anomaly. By Alfred Doering. n.d. In German. 4.00

5685-5741 PB M 73877 — Contribution to the early diagnosis of nephritis of scarlet fever. By Maria Doering. n.d. In German. 6.00

5742-5761 PB M 73877 — Cerebellar abscesses without symptoms. By Heinrich Falte. n.d. In German. (May reproduce poorly.) 2.00

5762-5784 PB M 73877 — Otogenic abscess of the temporal lobe and inhibition of pneumatization. By Kurt Fassold. n.d. In German. 2.50

5785-5804 PB M 73877 — Indications for abscess-tonsillectomy, with cases from the naval hospital of Bergen op Zoom. By Ernst Frank. n.d. In German. 2.00

5805-5834 PB M 73877 — The neurological syndrome in pernicious anemia. By Hermann Goess. n.d. In German. 3.00

5835-5939 PB M 73877 — Statistical clinical investigations concerning neuritis. By Robert Gollwitzer. n.d. In German. 10.50

5940-5992 PB M 73877 — Comparative clinical study of the chemical methods of pulp amputation, ("Albrecht-Gysi-Mum") and of the biological methods ("Calxyl-Pulpatekt-Vitapulp"). By Hermann Hammer. n.d. In German. 5.50

PB M 74142. ERLANGEN, GERMANY, UNIVERSITY. A collection of doctors' theses. (FIAT Microfilm Real C 247, Frames 8428-9489). 1938-1940. 1062 f. Price: Microfilm-$6.00 - Enlargement Print-$106.50.
The 52 individual items of this FIAT microfilm reel are listed below. They will be available as enlargement prints. Please give PB and frame numbers with ordering individual items of this microfilm reel. In German.

Frames	Title	Price
8428 - 8447 PB M 74142	The problem of suppuration of the abdominal wall after incision through the linea alba. By H. H. Westermann. 1939. In German.	$2.00
8448 - 8472 PB M 73142	Mineral metabolism and diet. By H. Althoff. 1939. In German.	2.50
8473 - 8482 PB M 73142	The vitamin C economy in skin diseases. By J. Altmeyer. 1940. In German.	1.50
8483 - 8502 PB M 73142	Paget's disease. By M. Arnold. 1939. In German.	2.00
8503 - 8511 PB M 73142	The physical properties of "Paladon", a material for use in dental prosthetics, as compared with "Neo-Hekolith" and dental rubber. By R. Baumann. 1939. In German.	1.50
8512 - 8528 PB M 73142	Diagnostic considerations in a case of birth paralysis involving both pairs of extremities, associated with dislocation of the hip joint and one-sided clubfoot. By W. Becker. 1939. In German.	2.00
8529 - 8537 PB M 73142	Investigations concerning the skin-cleansing agent, "Satina", and its value in performing gentle cleansing of the skin. By G. Beyer. 1939. In German.	1.50
8538 - 8549 PB M 73142	Test of more recent preparations for oral hygiene, compared with older ones. By L. Bittel. 1939. In German.	1.50
8550 - 8580 PB M 73142	Fundamental hereditary factors in pernicious anemia. By W. Blindow. 1938. In German.	3.50
8581 - 8594 PB M 73142	Aeration, humidifying, and ionization of rooms, and the sanitary signifi-	

cance of such procedures.
By K. Bodien. 1939. In German. 1.50

8595 - 8615 PB M 73142 — Cases of chronic diffuse glomerulonephritis as observed at the "Volhardsche Klinik". By D. Boshden. 1939. In German. 2.50

8616 - 8631 PB M 73142 — The role of heredity in the etiology of cardiac diseases. By R. Bös. 1939. In German. 2.00

8632 - 8647 PB M 73142 — The problem of the treatment of fermentative dyspepsia and infectious diseases of the gastrointestinal tract. By E. Braun. n.d. In German. 2.00

8648 - 8657 PB M 73142 — Results of palliative surgical treatment of perforated gastroduodenal ulcers. By W. Braun. 1939. In German. 1.50

8658 - 8670 PB M 73142 — The behavior of the Ca/K, Na/K and Na/Ca quotients in blood, blood cells, plasma and serum, in healthy and preeclamptic pregnant women. By E. Breidert. 1939. In German. 1.50

8671 - 8684 PB M 73142 — Identical with the foregoing.

8685 - 8699 PB M 73142 — Comparative studies regarding the problem of the bacteriological rapid-diagnosis of diphtheria.
By H. Büttner. 1939. In German. 1.50

8700- 8735 PB M 73142 — Interferometric investigations on the behavior of the catabolic ferments in blood after extirpation of the uterus (with removal of one or both ovaries), and after total menolipsis. By P. Buschbaum. 1939. In German. 4.00

8736 - 8744 PB M 73142 — Constitutional types in otosclerosis.
By H. Zorbach. 1939. In German. 1.50

8745 - 8759 PB M 73142 — Contribution to the knowledge of puerperal mastitis.
By E. Zurmeyer. 1939. In German. 1.50

8760 - 8770 PB M 73142 — Experiments on the utilization of fruits and vegetables by the organism. By K. Liesau. 1938. In German. 1.50

8771 - 9032 PB M 73142 — The histology of human and experimental eye tuberculosis, with special attention to tubercular retinitis.
By F. W. Meyer. 1940. In German. 26.50

9033 - 9049 PB M 73142 — Fractures and dislocations of the ankle joint. By W. Weber. 1940. In German. 2.00

9050 - 9107 PB M 73142 — On larynx tuberculosis, with special regard to the a-bacillary forms. By H. Weck. 1940. In German. 6.00

9108 - 9120 PB M 73142 — Traumatic epilepsy and its surgical implications.
By E. Weiler. 1938. In German. 1.50

9121 - 9150 PB M 73142 — The local conditions of the drinking water supply of the communities of the "Amtsbezirk" Lahr.
By B. Welte. 1939. In German. 3.00

9151 - 9171 PB M 73142 — Experimental studies concerning the effect of urine, urinary components and other substances on the growth of tubercle bacilli.
By K. W. Wenner. 1940. In German. 2.50

9172 - 9181 PB M 73142 — Investigations on the embryological development of the position of the esophagus. By R. Westerkamp. 1940. In German. 1.50

9182 - 9190 PB M 73142 — The hormone content of corpora lutea of whales.
By B. Wiesollek. 1940. In German. 1.50

9191 - 9203 PB M 73142 — Experimental studies on the treatment of scurvy-like conditions.
By G. Wilhelm. n.d. In German. 1.50

9204 - 9214 PB M 73142 — Results of serial examinations on silicosis of workers in the "Schauinsland" mine.
By R. Winterer. 1939. In German. 1.50

9215 - 9226 PB M 73142 — Can bile acids be traced in the urine of healthy persons?
By B. Zenner. 1940. In German. 1.50

9227 - 9239 PB M 73142 — X-ray symptoms of effusions and suppurations that have descended down the thorax.
By H. Ziesemer. 1940. In German. 1.50

9240 - 9250 PB M 73142 — Animal experiments concerning the effect of grape juice on the bactericidal power of blood and on diuresis. By G. Altner. 1939. In German. 1.50

9251 - 9270 PB M 73142 — The physician and his professional discretion. By H. Baruth. 1939. In German. 2.00

9271 - 9283 PB M 73142 — Investigations on the effect of unipolar-charged air on the resistance of mice infected with B. enteritidis Gärtneri.
By F. Baumann. 1940. In German. 1.50

9284 - 9294 PB M 73142 — Effect of various preserving procedures on the vitamin C content of orange juice. By G. Begerow. 1940. In German. 1.50

9295 - 9307 PB M 73142 — Cooperation of dentist and rhinologist in the field of surgical nasal corrections becoming necessary after trauma. By R. Behrens. 1940. In German. 1.50

9308 - 9315 PB M 73142 — Studies concerning the effect of follicular hormone on plants.
By W. Bergkirch. 1939. In German. 1.50

9316 - 9328 PB M 73142 — Interrelation of strain, vertical atrophy and organic disposition and the etiology of paradentosis.
By T. Blackert. 1940. In German. 1.50

9329 - 9338 PB M 73142 — The role of the pharyngeal tonsil in otitis media. By E. Blad. 1939. In German. 1.50

9339 - 9346 PB M 73142 — A case of urticaria pigmentosa persistens. By O. Brohm. 1940. In German. 1.50

9347 - 9354 PB M 73142 — Animal experiments regarding the effect of the vitamin combination preparation, "Tetravitol", on the

vitamin C economy and the bactericidal power of the blood. By G. Brühl. 1939. In German. 1.50

9355 - 9366 PB M 73142 — Histological changes in the epiphysis and the excretory urinary passages, in experimentally produced vitamin - A deficiencies. By P. L. Burgmann. 1939. In German. 1.50

9367 - 9399 PB M 73142 — The physician and "Social Insurance". By H. Busenbender. 1940. In German. 3.50

9400 - 9408 PB M 73142 — Animal experiments on the effect of a patent food preparation for infants on the bifidus flora in the intestinal tract. By F. Coramelor. 1939. In German. 1.50

9409 - 9424 PB M 73142 — Discussion on the teeth of small children. By I. Dann. 1940. In German. 2.00

9425 - 9432 PB M 73142 — Comparative investigations concerning the growth of gonococci on various cultures, with special regard to the effect of the temperature. By P. Dieckhoff. 1939. In German. 1.50

9433 - 9446 PB M 73142 — Prontosil and the possibility of its local application in dental surgery. By W.-U. Dinklage. 1940. In German. 1.50

9447 - 9455 PB M 73142 — The "Erosion Cancer". By H. Dominick. 1940. In German. 1.50

9456 - 9466 PB M 73142 — The hollow foot; its occurrance and treatment. By W. Dun. 1939. In German. 1.50

9467 - 9472 PB M 73142 — Treatment of gonorrhea in the years 1937, 1938, and 1939 at the dermatological department of the Marburg university hospital. By E. Eden. 1940. In German. 1.50

9473 - 9483 PB M 73142 — The fate of teeth situated in the crevice of a fracture. By T. Euler. 1940. In German. 1.50

9484 - 9489 PB M 73142 — The effect of the use of "Staatsquelle Niederselters" on the bactericidal power and the sugar level of blood. Examinations on rabbits. By W. Ewald. 1938. In German. 1.50

PB M 74065. KÖHLER, A. The consequences of an ankylosis of the elbow joint. (FIAT Microfilm Reel CC 263, Frames 1-16) 1946. 16 f. Price: Microfilm-$1.00 - Enlargement print-$2.00
This is an abstract from a doctoral thesis with the above title. It deals with a case of ankylosis of the elbow joint leading to restriction in the movements of the forearm and hand. The author discusses the damage incurred by the functional deficit, the possibilities of compensating the actual restriction of movements and the resulting performance of the carrier of the ankylosis. The measurement of the restriction of movements is described in detail. In German.

PB M 74113. MUNICH, GERMANY, UNIVERSITY. Various reports on X-ray research. (FIAT Microfilm Reel CC 291, Frames not numbered) 1938-1943. 25 f. Price: Microfilm-$1.00 - Enlargement print-$2.50
These reports were collected in the library of the above university. Three deal with kymographic studies of the heart and circulatory system under balneotherapeutic influences and one investigates the detection of cavities in incipient tuberculosis of the lung. In German. All four are reprints from medical journals.

PB M 86079. WILSON, J. W. Explosive decompression at high altitude. (AAF AMC Eng Div TSEAA Memo Rept 696-1M(3). Aug 1947. 21 p. Price: Microfilm-$1.50 - Photostat-$3.00
Explosive decompression per se, even to 75,000 feet, does not kill animals. The respiratory center, paralyzed by complete anoxia, spontaneously recovers with prompt recompression. The marked slowing of the heart is similarly reversible. The duration of respiration, when rats are decompressed in air and in oxygen, is related to the alveolar oxygen pressure at the final decompression altitude. At 52,500 feet the anoxia is as complete as at 75,000 feet or higher, and the duration of respiration at these higher altitudes, as these experiments have established, is the same. The experimental data on rats furnishes a provisional estimate of the chances of survival when decompressed at any given altitude, in air or in oxygen, and descending at free fall rate. Diagrams, photographs and graphs are attached.

METALS AND METAL PRODUCTS

PB L 70368. DAWIHL, W. and others. Papers on hard metal alloys, titanium and vanadium. (FIAT Microfilm Reel B 274, Frames 1-18). 1937-1940. 18 f.
Price: Microfilm-$1.00 - Enlargement Print-$2.00
This reel consists of three articles from the Research Society for Electric Lighting, Berlin (Studiengesellschaft für elektr. Beleuchtung) which have appeared in German literature. The articles are listed below and will be available as enlargement prints. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
1-7 PB L 70368	The lattice constants of the carbides and nitrides of titanium and vanadium. By W. Dawihl and W. Rix. Zeitschrift für anorganische und allgemeine chemie, vol. 244, 1940, p.191-197. In German.	$1.50
8-13 PB L 70368	Production and properties of titanium monoxide. By W. Dawihl and K. Schröter. Zeitschrift für anorganische und allgemeine chemie, vol. 233, 1937, p.178-183. In German.	1.50
14-18 PB L 70368	Influence of diffusion and alloy formation on the wearing resistance of hard metal alloys. By W. Dawihl. Zeitschrift für techn. physik, 1940, no.2, p. 44-46. In German.	1.50

PB L 70368-S. DAWIHL, W. and others. Papers on hard metal alloys, titanium and vanadium. (FIAT Microfilm Reel B 274, Frames 1-18, abstract cards). 1937-1940. 3 p. Price: Microfilm-$1.00 - Photostat-$1.50
Brief abstracts are presented of the individual items of microfilm reel B 274, PB 70368, listed above. The abstracts were prepared by FIAT personnel in Germany.

TEXTILES AND TEXTILE PRODUCTS

PB L 70416. I. G. FARBENINDUSTRIE A. G. Reports in the field of textile chemistry. (FIAT Microfilm Reel

Textiles and Textile Products (contd)

B 15, Frames 1-834) 1936-1944. 834 f. Price: Microfilm-$6.00 - Enlargement print-$83.50

This FIAT microfilm reel contains 84 reports and patent applications on the production of synthetic polyamide fibers, particularly "Perlon." Individual reports, listed below, will be available as enlargement prints. Please include PB and frame numbers when ordering an individual item. In German.

Frames	Title	Price
1-18 PB L 70418	Process for improving textile material. Draft for a patent application. By Spencker and Krumbein. Feb 28, 1944. In German. First draft incomplete.	$2.00
19-44 (27 frames) PB L 70418	Recovery of $\mathcal{E}$-caprolactam. Ger. patent application I 73581 IVc/12p, dated Nov 24, 1944. Inventor: Sauer. In German. Faulty numbering.	2.50
45-54 PB L 70418	Production of fibers from meltable crystalline linear polymers of high molecular weight. Ger. patent application, 1939-1944. In German.	1.50
55-61 PB L 70418	Method and device for melting thermoplastic substances. Ger. patent application I 66 296 XII/39a, dated Jan 16, 1940. In German.	1.50
62-70 PB L 70418	Method for melting plastics, particularly polymers of high molecular weight. Ger. patent application I 68638 XII/39a, dated Jan 11, 1941. In German.	1.50
71-74 PB L 70418	Spinneret head for the production of artificial threads. Ger. patent specification 734 518, class 29 a group: 6/10, dated Jan 26, 1941. Inventor: P. J. Hayes (Kenmore, N. Y.). In German.	1.50
75-79 PB L 70418	Process for continuous molding of meltable linear super polymers, sensitive to heat. Ger. patent specification 740 273, class 29b, group 3/60, dated Apr 13, 1940. Inventor: George de Witt Graves (Wilmington, Delaware). In German.	1.50
80-82 PB L 70418	Process for spinning super polyamides from the melt. Ger. patent specification 744 392, class 29b, group 3/06, dated Mar 10, 1939. Inventor: W. H. Bradshaw (Buffalo, N. Y.). In German.	1.50
83-90 PB L 70418	Process for spinning molten organic thread-forming substances. Ger. patent application 79 915 VII/29a, dated Feb 9, 1943. In German.	1.50
91-98 PB L 70418	Process for spinning molten, organic, crystalline linear polymers, especially polyamides. Ger. patent application 79 593 VII/29a, dated Dec 11, 1942. In German.	1.50
99-106 PB L 70418	Process for improving threads from synthetic, linear high polymers. Ger. patent application I 79 592 IVc/29b, dated Aug 9, 1939. In German.	1.50
107-115 PB L 70418	Process for the production of artificial fibers from the melt or from solutions. Ger. patent application B 197 350 VII/29a, dated Mar 4, 1942. In German.	1.50
116-132 PB L 70418	SOC. GENERALE PER L'INDUSTRIE MINERARIA E CHIMICA, MAILAND. Process for the production of thick threads from synthetic linear condensation polymers. Italian patent specification 393 142, dated Oct 18, 1941. In Italian and German.	2.00
133-136 PB L 70418	Appliance for spinning from the melt substances of high melting point. German registered design 1 503 125/29a, dated Jan 3, 1940. In German.	1.50
137-142 PB L 70418	Device for regulating the temperature of electrically heated parts. Ger. patent application I 65 314 VI/29a, dated Jul 31, 1939. In German.	1.50
143-148 PB L 70418	Process for melding synthetic linear high polymers. Ger. patent application I 73 926 IVd/29b, dated Dec 22, 1942. In German.	1.50
149-152 PB L 70418	Meltable plugs. Ger. patent application I 75 045 VII/29a, dated May 13, 1943. In German.	1.50
153-157 PB L 70418	Melt-spinning. Ger. patent application I 75 045 VII/29a, dated May 13, 1943. In German.	1.50
158-161 PB L 70418	Measurement and control of the pressure of plastic melts passing through tubes at high temperatures. Ger. patent application I 75 741 IIb/qu, dated Aug 21, 1943. In German.	1.50
162-164 PB L 70418	Process for increasing the adhesive power of fibers, threads, and flat bodies from linear polyamides. Draft for patent application by Müller. Jun 17, 1943. In German.	1.50
165-193 PB L 70418	Method for improving fibers and flat bodies from linear polyamides. Draft for patent application by Müller. Jul 4, 1942, filed Jul 10, 1942. In German.	3.00
194-197 PB L 70418	Determination of the degree of polymerization of polyamides by means of viscosimetry. By A. Matthes. Jan 21, 1944. In German. Not very legible.	1.50
198-199 PB L 70418	Fastness of "Perlon" against light and weather. By Littmann. Sep 14, 1944. In German.	1.50
200-203 PB L 70418	The effect of salt concentration and pressure on the degree of polymerization of "Perlon L." By Sauer. Apr 13, 1944. In German.	1.50
204-206 PB L 70418	Process for the production of tri- and tetramethylol-2,6-diamino-4-methyl-1,3,5-triazine. Ger. patent application I 75 625 IVc/12p, dated 1943. In German.	1.50
207-209 PB L 70418	Experiences in processing particles of "Igamid AS." By Spencker. Nov 30, 1943. In German.	1.50
210-212 PB L 70418	The capacity of "Perlon" to combine with acids. By Schermer. Apr 28, 1943. In German.	1.50
213-254 PB L 70418	Diphenyl mixture for heating baths. Apr 15, 1943. In German.	4.50
255-257 PB L 70418	"Perlon" fast dyes. Nov 16, 1942. In German.	1.50
258-269 PB L 70418	The effect of m-cresol on tanned bristles. Oct 27, 1942. In German.	1.50

270-282 PB L 70418 — The effect of the drying time on the viscosity of polyamide melts. By Kleinschrod. Aug 13, 1943. In German. 1.50

283-285 PB L 70418 — Experiments for reducing the stretching of "Perlon" fibers. By Spencker. Jun 16, 1942. In German. 1.50

286-287 PB L 70418 — Experiments for treating "Perlon" fibers. By Spencker. Jun 17, 1942. In German. 1.50

288-291 PB L 70418 — "Perlon" fiber pilot plant. Monthly report. May 1942. By Spencker. Jun 7, 1942. In German. 1.50

292-294 PB L 70418 — Viscosimeter for polyamide melts. By Kleinschrod. Sep 2, 1941. In German. 1.50

295 PB L 70418 — Nitrogen free of oxygen. Nov 11, 1941. In German. 1.50
Short communication.

296-305 PB L 70418 — Viscosimeter for polyamide melts. Jul 21, 1941. In German. 1.50

306-316 PB L 70418 — "Perluran." Mar 17, 1939. In German. 1.50

317-323 PB L 70418 — Colorimetric determination of the aluminum content of magnesium alloys. By A. Rauch. n.d. In German. 1.50

324-587 PB L 70418 — Polyamides. 1936-1943. In German. 26.50
List of patent applications.

588-591B PB L 70418 — Measurement of the viscosity of polyamide melts. By Kleinschrodt. Sep 2, 1941. In German. 1.50

592-604 PB L 70418 — The viscosity of the "Perlon L" melt. By Kleinschrodt. Mar 5, 1943. In German. 1.50

605-612 PB L 70418 — Viscosimeter for polyamide melts. By Kleinschrodt. Sep 2, 1941. In German. 1.50

613-628 PB L 70418 — Continuous process for producing carbon disulfide from sulfur and materials containing carbon. By Legeler. Apr 23, 1938. Nov 30, 1941. In German. 2.00

629 PB L 70418 — Purification of lactam. By Kleine. Dec 11, 1944. In German. 1.50

630 PB L 70418 — Igamides. By Krumbein. Oct 7, 1944. In German. 1.50

631-642 PB L 70418 — Spinning of polyurethane. By Sauer. Jul 11, 1944. In German. 1.50

643-665 PB L 70418 — "Perlon" rayon and nylon. By Kleine. Jun 28, 1944. In German and English. 2.50

666-672 PB L 70418 — "Vistra" fiber. By Schiele. 1942. In German. 1.50

673-676 PB L 70418 — "Vistra" fiber. By Ernst Wörn. 1941. In German. 1.50

677 PB L 70418 — Air conditioning for spinning "Igamid BB." By Zoller. Jan 3, 1945. In German. 1.50

678 PB L 70418 — Spinning without pressure pump. Oct 25, 1944. In German. 1.50

679-682 PB L 70418 — Determination of the water content in dried "Igamid BB." Jun 25, 1944. In German. 1.50

683-684 PB L 70418 — Lactam analysis. By Means. Mar 11, 1943. In German. 1.50

685 PB L 70418 — Polyurethane. By Spencker. Apr 10, 1943. In German. 1.50

686-688 PB L 70418 — Problems of treating "Perlon" fibers. By Spencker. Jan 13, 1943. In German. 1.50

689-690 PB L 70418 — Spinning tests of "Igamid AS." Jan 20, 1943. In German. 1.50

691-692 PB L 70418 — Tanning agents for "Perlon" fiber. By Müller. May 15, 1944. In German. 1.50

693-695 PB L 70418 — Treatment of "Perlon" fibers. By Spencker. Apr 21, 1944. In German. 1.50

696-702 PB L 70418 — The effect of tannin and synthetic tanning agents on polyamides. Oct 28, 1942. In German. 1.50

703-713 PB L 70418 — Various memorandums. Feb 1942. In German. 1.50
Poorly legible.

714-721 PB L 70418 — Tanning agents. "Perlon" fiber. By Müller. Oct 9, 12, 1944. In German. 1.50

722-726 PB L 70418 — The affinity of Eromin SG to the "Perlon" fiber. By Müller. Sep 30, 1944. In German. 1.50

727-730 PB L 70418 — Weather tests of "Perlon" fabrics. By Müller. Aug 28, 1944. In German. 1.50

731-735 PB L 70418 — "Tanigan DLN." By Müller. May 26, 1944. In German. 1.50

736 PB L 70418 — Treatment of "Perlon" fibers. By Müller. Apr 4, 1944. In German. 1.50

737-741 PB L 70418 — Treatment of "Perlon" fibers and plastics. By Müller. Mar 27, 1944. In German. 1.50

742-744 PB L 70418 — Sulfone tanning agents. By Müller. Dec 29, 1943. In German. 1.50

745-746 PB L 70418 — "Perlon" fiber. Recovery of monolactam. By Müller. Dec 10, 1943. In German. 1.50

747-754 PB L 70418 — "Perlon" fiber treatment with 4,4'-dihydroxy diphenylsulfone. By Korn. Aug 21, 1943. In German. 1.50

755-757 PB L 70418 — Treatment of "Perlon" fibers with urea resins. By Müller. Jun 21, 1943. In German. 1.50

758-764 PB L 70418 — "Perlon" fibers treated with "Tanigan DLN." By Müller. Jun 3, 1943. In German. 1.50

765-771 PB L 70418 — Treatment of "Perlon" fibers with sulfone tanning agents. By Müller. Mar 26, 1943. In German. 1.50

772-773 PB L 70418 — Determination of water in "Perlon" particles. By Müller. Mar 29, 1943. In German. 1.50

774-778 PB L 70418 — Treatment of "Perlon" fibers with synthetic tanning agents. By Müller. Jan 25, 1943. In German. 1.50

779-791 PB L 70418 — Experiments on the effect of drying on the viscosity. By Spencker and Müller. Jan 7, Apr 28, 1943. In German. 1.50

792-795 PB L 70418 — Treatment of "Perlon" fibers with synthetic tanning agents. By Müller. Dec 14, 1942. In German. 1.50

796-799 PB L 70418 — Treatment of "Perlon" fibers with tannin and synthetic tanning agents. By Müller. Jul 29, 1942. In German. 1.50

800 PB L 70418 — Tests of "AS" particles. Aug 25, 1942. In German. 1.50

801-816 PB L 70418 — Extractions and tests of tanned "Perlon" fibers. By Müller. Jul 29, 1942. In German. 2.00

817-823 PB L 70418 — Treatment of "Perlon" fibers with aqueous tannin baths. By Müller. Jun 17, 1942. In German. 1.50

824-825 PB L 70418 — Pilot plant "Perlon" fiber. Monthly report. Apr 1942. In German. 1.50

826-828 PB L 70418 — The water and lactam content of "Perlon" fibers. By Müller. Mar 19, 1942. In German. 1.50

829-834 PB L 70418 — "Perlon" fiber tests. By Graumann. Jan 29, 1942. In German. 1.50

PB L 70418-S. I. G. FARBENINDUSTRIE A. G. Reports in the field of textile chemistry. (FIAT Microfilm Reel B 15, Frames 1-834, abstract cards) 1935-1944. 82 p. Price: Microfilm-$2.00 - Photostat-$6.00
These are short abstracts of the items on reel B 15, PB L 70418, listed above. They were prepared by FIAT abstracters in Germany. In English.

PB L 27451-82. MECHELS, OTTO and DIERKES, GERHARD. On the preservation of the cellulose molecule arrangement in the preparation of "cellulose wool." (Supp. II of PB 27451, Report on German Research Institute for the Textile Industry) 1937. 34 p. Price: Microfilm-$1.00 - Photostat-$3.00
This report is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. It is in two parts, theoretical and experimental. The chemical constitution and molecular weight of cellulose and the application of the constitution of cellulose to the chemical and physical properties of cotton and rayon are discussed. Details of pressure cooking experiments (31 separate experimental series) and analytical results of same are given. The decomposition of cellulose fiber on the basis of the above results is discussed. Also 8 spinning experiments are described. Photographs show a spinning machine and a textile testing machine. Microscopical pictures illustrate the results of the cooking experiments. In German.

PB L 27451-83. MECHELS, OTTO and WERNING, HUBERT. On alkali ripening of wood cellulose. (Supp. III to PB 27451, Report on the German Research Institute for the Textile Industry) 1938. 30 p. Price: Microfilm-$1.00 - Photostat-$2.00
This is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. In the present report the behavior of alkali cellulose of varying stages of ripening to naphthols was studied. To determine the stage of ripening, viscosity measurements proved highly satisfactory. For this purpose the cellulose was dissolved in bottles by adding ammoniacal copper oxide to the previously rasped substance. Further details of this method are explained. When cotton strands were treated with sodium hydroxide, major injuries did not arise (during the preripening process) till after an elapse of several days. Adsorption experiments on "Cellulose B" with methylene blue solution showed, with beginning preripening, adsorption first to rise to a maximum value, then to drop. Tables and graphs are included. In German.

PB L 27451-84. MECHELS, OTTO and FELLER, ERICH. On the effect of chemicals on wool, and quantitative methods for determining injuries to wool. (Supp. IV to PB 27451, Report on the German Research Institute for the Textile Industry) 1939. 54 p. Price: Microfilm-$2.00 - Photostat-$4.00
This is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. The effect of chemicals on wool was determined by the following method. Aqueous and alkaline extracts were made from staple wool and chemically treated samples of wool. It appeared that the damaged samples of wool yielded more amino acids into the extract than did staple wool. The amino acids that went into solution were taken as a measure for the attack on the fiber. The amino acids were determined by ascertaining the relationship of the H ion activity to the H ion concentration, or by the formal titration process according to Sörensen, or by a recently developed diacetyl titration process, which is applicable also to dyed solutions with the aid of potentiometric titrations. Chemical formulas, tables and diagrams are included. In German.

PB L 27451-85. DEUTSCHES FORSCHUNGSINSTITUT FÜR BEKLEIDUNGSINDUSTRIE, M. GLADBACH-RHEYDT. From practice and theory of the clothing industry. (Supp V to PB 27451, Report on the German Research Institute for the Textile Industry) 1940. 60 p. Price: Microfilm-$2.00 - Photostat-$4.00
This folder is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. It contains papers in the field of production of textile fabrics and clothing, and methods of manufacturing serial products and the like. Numerous diagrams are included. In German.

PB L 27451-86. DONNER, H. Method and time studies in the production of overcoats from army cloth. (Supp VI to PB 27451, Report to the German Research Institute for the Textile Industry) 1941. 80 p. Price: Microfilm-$2.00 - Photostat-$6.00
This is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. The studies reported here deal with planning of production and preparatory measures concerning time studies. The production work and total manufacturing time were divided up and other calculative measures were taken, to make possible a more thorough study of work and manufacturing time. The studies conducted by expert timers attained savings in total time by 65 minutes on the average. Saving in man power, in connection therewith, amounted to 17 percent. In German.

PB L 27451-87. MITTEILUNGEN DES DEUTSCHEN FORSCHUNGS-INSTITUTS FÜR TEXTILINDUSTRIE, M. GLADBACH-RHEYDT. Fish protein in nutrition and clothing. (Supp VII to PB 27451, Report on the German Research Institute for the Textile Industry) 1939. 24 p. Price: Microfilm-$1.00 - Photostat-$2.00
This is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. This folder contains two papers, entitled "The sea as an arsenal of raw material" and "Fiber animalized with fish protein." In German.

PB L 27451-88. MECHELS, OTTO and ESSIO, K. A. "Vikilan," a cellulose animalized with fish protein.

(Supp VIII to PB 27451, Report on the German Research Institute for the Textile Industry) 1940. 55 p. Price: Microfilm-$2.00 - Photostat-$4.00
This monograph is a supplement to the "Report on the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. Muscular protein from white fish was chemically analyzed, particularly in respect to its behavior toward viscose. Experiments showed fish protein to be superior to casein as to alkaline decomposition and resistance to viscose. The ripening processes of viscose in the presence of protein and of spinning solutions from viscose and protein were studied. After examining the dye properties of spinning products from viscose and protein in general, the dyeing process in mixtures of fish cellulose wool ("Wikilan") and woolen fabrics was studied under various conditions. Results are reported. In German.

PB L 27451-$11. FORSCHUNGSINSTITUT FÜR TEXTILINDUSTRIE UND BEKLEIDUNGSPHYSIOLOGIE, DONNIGHEIM, GERMANY. Results of research work by Prof. Dr. Ing. Otto Mechsels. (Supp XI to PB 27451, Report on the German Research Institute for the Textile Industry) n. d. 8 p. Price: Microfilm-$1.00 - Photostat-$1.00
This document is a supplement to the "Report of the German research institute for the textile industry," abstracted in Bibliography, vol. 2, p. 58. The subjects discussed in this report are: (1) mercerization of cotton with sodium hydroxide; (2) measurement of softness of material; (3) impregnation with water-repelling agents; (4) "Bulanisierung" of wool; (5) bleaching procedures; (6) measuring the resistance to wear and tear; (7) substantivity of textile aids; (8) fibrous material from fish protein; (9) effect of high-finishing on the strength of textiles; (10) clothing chemistry; (11) work clothing. In German.

TRANSPORTATION EQUIPMENT

AERONAUTICS

Aircraft

PB L 81763. ALEXANDER, S. R. and SIVELLS, JAMES C. Tests of a 1/14-scale powered model of the XB-36 airplane in the Langley 19-foot pressure tunnel. I - Stalling characteristics and aileron effectiveness of several wing and flap arrangements. (Natl Advisory Committee for Aeronautics Rept L-624, Memo Rept L5B23) Feb 1945. 61 p. Price: Microfilm-$2.50 - Photostat-$7.00
An investigation was conducted in the Langley 19-foot pressure tunnel to determine the stalling characteristics, aileron effectiveness, and, to a limited extent, the longitudinal stability of a 1/14-scale model of the XB-36 airplane. The model was tested with the original wing-flap configuration and with several modifications to the outboard panels and flap arrangement. The modifications to the outboard wing panels consisted of (1) the original panels with midchord slots ahead of the ailerons, and (2) a revised panel which incorporated changes in airfoil section, twist, plan form, and aileron area. The flap arrangements included full- and partial-span, single- and double-slotted configurations. With the original wing and the full-span flap arrangement the model exhibited unsatisfactory stalling characteristics, insufficient aileron effectiveness, particularly with flaps deflected, and longitudinal instability after the stall with flaps deflected. The slotted panels were better than the revised panels in improving the stalling characteristics. None of the configurations tested, however, produced satisfactory stalling characteristics. The configuration with the revised panels exhibited better aileron effectiveness, which is attributed mainly to the increase in aileron area. With flaps deflected, the greatest improvement in aileron effectiveness was realized by changing the flap configuration from full span to partial span. The use of partial-span, double-slotted flaps produced a greater maximum lift coefficient than that obtained with the other flap configurations but caused a large change in trim lift coefficient. The static longitudinal instability after the stall experienced by the model with flaps deflected for take-off and landing was less severe with the modified outboard panels than with the original wing. Curves, diagrams and photographs are appended.

PB L 85929. BELSLEY, STEVEN B. and JACKSON, ROY P. The effect of amphibious floats on the power-off stability and control characteristics of a twin-engine cargo airplane. (Natl Advisory Committee for Aeronautics Rept A-73) Jan 1943. 106 p. Price: Microfilm-$3.50 - Photostat-$11.00
Power-off wind-tunnel tests of a 1/11-scale model of a twin-engine cargo airplane equipped with amphibious floats are reported herein. The tests were conducted in the Ames 7- by 10-foot wind tunnel at the request of the Army Air Forces Materiel Command. Longitudinal and lateral stability and control characteristics were investigated for three flap positions. At any given angle of attack, the floats have a negligible effect on the lift coefficient. The longitudinal destabilizing effect of the floats is equivalent to a 2-percent M.A.C. shift of the neutral point. The floats-on full-load stability is, however, greater than the floats-off full-load stability because of a 3-percent M.A.C. shift forward of the full-load center of gravity when the floats are added. The directional stability is reduced by the floats an amount equal to $\Delta dC_n/d\Psi = 0.0004$. Three of four tail variations tested to compensate for this loss in directional stability proved satisfactory. The floats do not change the control characteristics of either the elevator or rudder. The measured drag increment due to the floats is $\Delta C_{D_p} = 0.0095$. The test results indicate that, if one of the three skid fins is added, the longitudinal and lateral stability and control characteristics of the airplane will be as satisfactory floats on as floats off.

PB L 81722. BOODY, LEE E. The high-speed characteristics of several flaps and spoilers on the upper surface of the horizontal stabilizer of a model of a radial-engine pursuit airplane. (Natl Advisory Committee for Aeronautics Rept A-72, Memo Rept A5L07) Jan 1946. 188 p. Price: Microfilm-$5.50 - Photostat-$19.00
An investigation was made in the Ames 16-foot high-speed wind tunnel of several types and sizes of flaps and spoilers located immediately forward of the elevators on the upper surface of the horizontal stabilizer of a model of a radial-engine pursuit airplane. The elevator characteristics, the elevator-fixed and elevator-free balance lift coefficient, and the trim drag coefficient of the model are given through a Mach number range of 0.20 to 0.815 for all the flaps and spoilers tested. In addition, the effect of the largest flap on the maneuver forces, the stick-fixed and stick-free neutral point, and the chordwise pressure distribution on the horizontal tail at a station through the flap are given. Throughout the Mach number range of the tests, except for small deflections, the flaps and spoilers produced a download on the tail and caused the elevators to float more negatively, thus increasing the trim lift coefficient. A reversal of the trim lift coefficient existed for small flap deflections and was caused largely by the fact that the elevators tended to float more positively until the flaps were extended above the critical height. Any of the devices having a projected area normal to the stabilizer surface of about 2 percent of the horizontal-tail area should provide satisfactory recovery of the airplane from a dive at 0.815 Mach number. However, the acceleration available decreased rapidly with increased Mach number above the Mach number at which the pitching-moment characteristics of the model diverged. Although the flaps and spoilers were suitable as a dive-recovery device, the reversal of their effectiveness with small deflections and their detrimental effect upon the stick-free stability of the model rendered them unsatisfactory as a longitudinal trim device. Many figures are included.

PB L 81764. CRANE, H. L. and others. Measurement of flying qualitites of a DeHavilland Mosquito F-8 airplane (AAF No. 43-334960). II - Longitudinal stability and control characteristics. (Natl Advisory Committee for Aeronautics Rept L-614, Memo Rept L5G11) Jul 1945. 55 p. Price: Microfilm-$2.25 - Photostat-$6.00
This report presents the results of tests to determine the longitudinal stability and control characteristics and the stalling characteristics of a DeHavilland Mosquito F-8 airplane. This report has no bearing on the performance

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characteristics, which were not measured, but which were considered to be exceptionally good. Some desirable features of the longitudinal handling qualities of the F-8 airplane were: 1. The control forces in accelerated flight were within the 7 to 38 pound per g range specified as satisfactory over the test center-of-gravity range (33.4 to 38.1 percent mean aerodynamic chord). 2. The elevator control was adequate for longitudinal control during take-off and landing and to reach the stall in straight or turning flight. 3. The trim changes due to flaps, power, and landing gear were not excessive and the power of the elevator trimming tabs was adequate. 4. The stalling characteristics were very good with adequate warning in the form of buffeting and pitching. Lateral control could be maintained after the buffeting and pitching occurred. Recovery was easily accomplished by application of down elevator. Some undesirable features of the longitudinal handling qualities were: 1. The airplane was slightly unstable stick fixed in the rated-power clean, gliding, landing, approach, wave-off, and cruising conditions with the normal center-of-gravity position. 2. The airplane was neutrally stable or slightly unstable stick free in the rated-power clean, landing, approach, and wave-off conditions with the normal center-of-gravity position. 3. Although stable stick free the airplane was unstable stick fixed in high-speed turns with the normal center-of-gravity position. Many graphs and diagrams.

PB L 86057. CRANE, ROBERT M. and HOLTZCLAW, RALPH W. Wind-tunnel investigation of ailerons on a low-drag airfoil. I. The effect of aileron profile. (Natl Advisory Committee for Aeronautics Rept A-55; AC Rept 4A14) Jan 1944. 63 p. Price: Microfilm-$2.50 - Photostat-$7.00

An investigation was made in the Ames Aeronautical Laboratory 7- by 10-foot wind tunnel of the effects of various modifications to the profile of a 0.20-chord plain sealed aileron and a 0.15-chord plain sealed aileron on an NACA 66,2-216 (a = 0.6) airfoil. Aileron profiles tested consisted of one profile conforming to the normal NACA 66,2-216 (a = 0.6) ordinates; a profile consisting of straight-line surfaces from the trailing edge to the hinge-line ordinates; an intermediate thickened profile; and aprofile thinned below the normal airfoil ordinates. Thickening of the aileron profile was found to reduce the aileron effectiveness, reduce the slope of the wing section lift curve, and reduce the hinge-moment coefficients. Thinning the profile had the opposite effect. The effects of profile on the aileron characteristics decreased with increasing angle of attack, there being practically no effect at an angle of attack of 12°. Thickening the profile caused a slight increase in minimum profile-drag coefficient, but thinning the profile had no effect. It is demonstrated that deviations of the order of $\pm 0.005c_a$ from the specified profile on the ailerons of a typical pursuit airplane can cause stick-force variations of ±20 pounds for a large rate of roll at an indicated airspeed of 300 miles per hour. It is also shown that the danger of overbalance at small deflections of closely balanced ailerons can be diminished by thickening of the aileron profile if the internal-balance chord is simultaneously reduced to maintain the same stick force for a large rate of roll.

PB L 85560. GORANSON, R. FABIAN. Measurement of individual aileron hinge moments and aileron control characteristics of a P-40F airplane. (Natl Advisory Committee for Aeronautics Rept L 649; Memo Rept L5A29a) Jan 1945. 40 p. Price: Microfilm-$1.75 - Photostat-$4.00

Flight measurements have been made of the individual aileron hinge moments, aileron rolling effectiveness pb/2V, and stick-force characteristics in abrupt aileron rolls with a P-40F airplane (AAF No. 41-14119) over an indicated airspeed range from 108 to 304 miles per hour. Three methods for measuring the rate of change of hinge moment with angle of attack were investigated. Presented for comparison with the flight results are data from two-dimensional wind-tunnel tests of the wing-aileron profile as measured at the center aileron hinge. These measured characteristics of the P-40F standard ailerons show that these ailerons produced a helix angle pb/2V of 0.08 radian at 200 miles per hour, but that the elastic control system reduced the maximum helix angle to 0.06 with full stick deflection at 300 miles per hour. Stick forces were objectionably unsymmetrical to left and right. Hinge-moment measurements show that the flight measured values were approximately 40 to 60 percent of the value indicated by two-dimensional tests with the largest difference appearing at high aileron deflections. Another point worth noting is that flight tests also showed that the ailerons were effective to approximately 2° higher deflection than indicated by the wind-tunnel tests. This comparison between flight and wind-tunnel data indicates the need to evaluate the lifting-surface theory and thereby provide the numerical quantities necessary to correct section data for plan-form effects when estimating stick forces for a finite aileron-wing combination.

PB L 86063. GRAHAM, ROBERT R. and ASHWORTH, C. DIXON. Tests in the 19-foot pressure tunnel of a 1/2.75-scale model of the F4U-1 airplane with several balanced elevators, full-span flaps, and droppable gas tank. (Natl Advisory Committee for Aeronautics Rept L-440) Oct 1942. 50 p. Price: Microfilm-$2.00 - Photostat-$5.00

An investigation was made in the NACA 19-foot pressure tunnel to determine the aerodynamic effects of several elevators with varying amounts of balance, of outboard split flaps, and of a droppable gas tank on a 1/2.75-scale model of the F4U-1 airplane. The investigation included: (a) Measurements of the hinge-moment characteristics and effectiveness of various elevators; (b) Measurements of the effects of adding split flaps outboard of the normal slotted flaps and ahead of the ailerons, on the stalling and control characteristics of the model; and (c) Measurements of the effects of suspending a droppable gas tank below the fuselage on the lift, drag, and longitudinal stability of the model. In order to provide a basis for comparison of the various balanced elevators, stick forces for various indicated airspeeds were computed for each elevator from the power-off results. The power-on results are not complete enough to obtain the effect of power on the elevator stick forces. The outboard split flaps increased the maximum lift coefficient approximately 6 percent with power on and 9 percent with power off. They had a negligible effect on the stalling characteristics and the longitudinal stability but reduced the aileron effectiveness. The droppable gas tank had no measurable effect on the maximum lift coefficient or the longitudinal stability of the model. Its drag increment at 100 miles per hour amounted to 9 pounds and 14 pounds at lift coefficients of 0.16 and 0.5, respectively.

PB L 81768. JARVIS, GEORGE A. and FISHER, LLOYD J. Correlation tests of the ditching behavior of an Army B-24D airplane and A 1/16 size model. (Natl Advisory Committee for Aeronautics Rept L-617, Memo Rept L6A03) Jan 1946. 18 p. Price: Microfilm-$1.25 - Photostat-$2.00

Tests were conducted to correlate model and full-scale ditching performances for the Army B-24D airplane. A dynamically similar model of the B-24D airplane was ditched in calm water in Langley tank No. 2 and from an outdoor catapult. A full-scale B-24D airplane was ditched under controlled conditions in calm water in the James River near Langley Field, Va. The behaviors of both model and full-scale airplane were ascertained by making visual observations, by recording time histories of decelerations, and by taking motion picture records of the ditchings. The results are presented in the form of sequence photographs and time-history curves for attitudes, vertical and horizontal displacements, and longitudinal decelerations. Conclusions based on one full-scale test and several model tests were as follows: 1. Wing lift was an important factor in model ditching tests and the most accurate simulation of full-scale performance was obtained by ditching the model at such speeds as were necessary to obtain the correct lift even though ground speed and airspeed were slightly in error 2. The time-history curves for attitudes and horizontal and vertical displacements for model and full-scale tests were in reasonable agreement. 3. The maximum longitudinal decelerations for model and full-scale ditchings did not necessarily occur at the same part of the run and the full-scale maximum deceleration was about 50 percent greater. 4. The dynamic behavior of the model was affected very little by the break in the fuselage that occurred near the end of the run.

CHEMICALS AND ALLIED PRODUCTS

PB L 85632. BREUERS (Inventor). Preparation of hydroxyalkyl thioethers. (I. G. Farben patent application O. Z. 14035; O. Z. 14319 (contd.)) Jan 1945. 7½ p. Price: Microfilm-$2.75 - Photostat-$6.00
Hydroxyalkyl thioethers are prepared by reacting unsaturated alcohols or their functional derivatives at a moderate temperature (50 to 150 degrees C) with hydrogen sulphide in the presence of basic catalysts. The yields are 85 to 95 percent. Used as softening agents for textile industry. Patent file including correspondence. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85635. HESSLIN, ALFRED (Inventor). Organic compounds containing sulphur and chlorine. (I. G. Farben patent application O. Z. 14547) Jun 1944. 13 p. Price: Microfilm-$1.25 - Photostat-$2.00
Olefinic compounds may be reacted with thionyl chloride to form products containing both halogen and sulfur. The reaction is carried out preferably in presence of a Friedel-Craft type of catalyst. The compounds are valuable intermediates. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85634. HESSLIN, ALFRED (Inventor). Preparation of esters of organic sulphur compounds containing several hydroxy groups. (I. G. Farben patent application) Jun 1944. 17 p. Price: Microfilm-$1.25 - Photostat-$2.00
A method is presented for the preparation of esters of polyhydroxy organic sulfur compounds by reacting the corresponding halogen compound with alkali and ammonium salts of organic acids in the presence of solvents. The products are plasticisers. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85652. HESSLIN (Inventor). Sulphur and halogen-containing organic compounds. (I. G. Farben patent application O. Z. 14,086) Jul 1943. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
Halogen-containing disulfides can be prepared in good yields by reacting halogen sulfides in presence of a Friedel-Craft catalyst with mono- or di-substituted halogen olefins in which the halogen is adjacent to the double bond. In German with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85394. HANSCHKE, ERNST (Inventor). Preparation of aldol. (I. G. Farben patent application O.Z. 12684) Oct 1942. 65 p. Price: Microfilm-$2.50 - Photostat-$7.00
Method for obtaining high concentrations of aldol from crude aldol by distilling the acetaldehyde from the aldol under vacuum in the presence of slightly basic or slightly acidic buffers. Folder also contains correspondence and some patents on related subjects. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 84197. I. G. FARBENINDUSTRIE A. G. Index of Patent applications. (FIAT Microfilm Reel A 8, Frames 10377-11111) 1928-1933. 735 f. Price: Microfilm-$7.00 - Enlargement print-$75.00
This FIAT microfilm reel contains lists of I. G. patent applications. They are listed in volumes which were compiled about every two years. Frames 10377-10411 appear to be the conclusion of volume V. Frames 10412-10629 are volume VI, 1928-1929. Frames 10630-10857 are volume VII, 1929-1931. Frames 10858-11096, volume VIII, 1931-1933. Frames 11096-11111 contain the beginning of volume IX, 1933-1935. (Continued in reel A 9, PB L 84206.) Each volume is divided into two sections. The first section lists the applications chronologically by internal I. G. serial numbers ("O.Z. numbers"). The numbers given by the German patent office ("F numbers") have been added where available. Dates and short descriptive titles of the inventions or processes are given. The second section contains an alphabetical index by subject headings of the applications in the first section. In German.

PB L 85659. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Dryers for drying oils. (Patent application O. Z. 14159) May 1943. 22 p. Price: Microfilm-$1.50 - Photostat-$3.00
Hexa-substituted ethanes which breakdown into trivalent carbon radicals are suggested as accelerators for drying oils, since they do not undergo syneresis like the customary metal accelerators. Comparative figures showing drying times with the customary cobalt dryer and also without accelerator are included. In German. Abstract prepared at Headquarters Air Material Command, Wright Field, Dayton, Ohio.

PB L 73724. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Method for the production of alcohols. (FIAT Microfilm Reel CC 211, Frames 1-3) 1945. 3 f. Price: Microfilm-$1.00 - Enlargement print-$1.50
This is the draft of a patent application dated November 22, 1945. The method consists in hydration of olefins, in the liquid phase, in the presence of oxides or nitrides of tungsten, molybdenum or vanadium. In German.

PB L 85630. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of aldol of high concentration. (Patent application O. Z. 12684) Mar 1941. 16 p. Price: Microfilm-$1.25 - Photostat-$2.00
High concentration of aldol can be obtained from crude aldol by redistilling the unreacted acetaldehyde under vacuum in the presence of weakly basic or acidic buffer solutions. Process prevents formation of secondary reaction products and gives a high ratio of aldol to acetaldehyde. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85658. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of alpha-alkoxy carboxylic acids, salts and functional derivatives. (Patent application O. Z. 13762) Oct 1942-Dec 1943. 33 p. Price: Microfilm-$1.75 - Photostat-$4.00
Alpha alkoxy carboxylic acids can be prepared in good yields by reacting alpha-halogenated carboxylic acids, their salts, or functional derivatives, with free alcohols in the presence of alkali hydroxides and absence of water, and removing the water formed by the reaction. Temperature range is 30 to 80 degrees C. The acids are intermediates for plasticizers. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85646. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of carboxylic acids and esters. (Patent application O. Z. 14210) May 1943. 20 p. Price: Microfilm-$1.25 - Photostat-$2.00
Carboxylic acids and esters can be prepared by oxidising the corresponding acetals in the liquid phase at moderate temperatures in the presence of oxidising catalysts by means of molecular oxygen. The method presents the advantage of utilising acetals which are a byproduct of various technical processes. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85631. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of diolefines from glycols. (Patent application O. Z. 13076) Jan 1944. 69 p. Price: Microfilm-$2.50 - Photostat-$7.00
Glycols are converted to diolefines in good yields when hydrogen is added to the vapors passing over the customary catalyst. Folder contains patent file including correspondence. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85640. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of esters of organic sulfides containing several hydroxy groups. (Patent application) Jun 1944. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00
Esters of polyhydroxy sulfides are prepared in yields of 80-85 percent by reacting the corresponding halogen-sulfides with the alkali or the ammonium salt of the acid in the presence of solvents. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85647. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Preparation of sulphur-containing organic compounds. (Patent application O. Z. 13847) May 1944. 42 p. Price: Microfilm-$2.00 - Photostat-$5.00
Sulfur-containing organic products are obtained by reacting aliphatic mercaptocarboxylic acids, or their esters or amides, with unsaturated alcohols containing no more than 5 carbon atoms, or with corresponding esters, ethers, or acetals. The reaction temperature is 80-95 degrees C. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85638. I. G. FARBENINDUSTRIE A. G., LUDWIGSHAFEN, GERMANY. Synthesis of higher chlorinated compounds. (Patent application O. Z. 13688) Sep 1942. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00
To obtain the compounds, simple unsaturated aliphatic halogen compounds may be reacted with saturated halogen compounds, in which at least one halogen is attached to a secondary or tertiary carbon atom. The reaction is carried out in the presence of a Friedel-Craft type of catalyst. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85642. KLEBER (Inventor). Method for carrying out electrolysis. (I. G. Farben patent application O. Z. 13603) Apr 1943. 21 p. Price: Microfilm-$1.50 - Photostat-$3.00
A method is proposed for avoiding undesired cathodic activity, particularly the reduction of material formed at the anode, by carrying out the electrolysis in the presence of compounds of elements of group 4, particularly titanium and zirconium. The presence of fluorine ions is advantageous. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85661. LEIBITZ-PIWNICKI, VON and DORRER, E. (Inventors). Vinyl chloride. (I. G. Farben patent application O. Z. 11662) Jul 1944. 97 p. Price: Microfilm-$3.25 - Photostat-$10.00
Practically pure vinyl chloride in high yields can be prepared by passing an equal mixture of acetylene and hydrogen chloride through a concentrated hydrochloric acid solution containing the catalyst mercuric chloride or cuprous chloride or both. The action of these catalysts may be combined with that of soluble chlorides of heavy metals of groups 2, 5, and 7 in the periodic table. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85637. MÜLLER, W. and MAY (Inventors). Purification of alkylene oxides. (I. G. Farben patent application O.Z. 12754) Jul 1943. 45 p. Price: Microfilm-$2.00 - Photostat-$5.00
Purification of alkylene oxides, particularly ethylene oxide, contaminated with ammonia or amines, is accomplished by treating the oxides with formaldehyde and separating them from the condensation products by distillation. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85636. HELLER, J. and FRITSCHI, U. (Inventors). Alcohols of high molecular weight. (I. G. Farben patent application O. Z. 14492) Dec 1943. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
Preparing of alcohols of higher molecular weight from alcohols of lower molecular weight in presence of alkaline catalysts. Reaction is continuous and carried out in liquid phase. In German, with an English abstract. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85645. HELLER, J. and LAUTER (Inventors). Preparation of derivatives of low polymeric products from unsaturated carboxylic acids. (I. G. Farben patent application O. Z. 14,990) Oct 1944. 18 p. Price: Microfilm-$1.25 - Photostat-$2.00
Derivatives are obtained by reacting esters, amides, and nitriles of alpha-beta unsaturated acids with small amounts of strong alkaline materials in the absence of water. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85660. OSTERMAYER and DORRER, E. (Inventors). Preparation of chlorinated ethylenes. (I. G. Farben patent application O.Z. 12,661) Oct 1944. 65 p. Price: Microfilm-$2.50 - Photostat-$7.00
Polychlorinated ethanes are continuously converted into substituted chlorinated ethylenes by passing them into a tower with aqueous alkali and heating the tower to at least the boiling point of the olefinic compound. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85649. OSTERMAYER and DORRER (Inventors). Preparation of perchloroethylene. (I. G. Farben patent application O.Z. 14080) Feb 1944. 25 p. Price: Microfilm-$1.50 - Photostat-$3.00
Perchloroethylene can be obtained in good yields (88 percent) when an intimate mixture of 1 part/vol. acetylene and 3.5 to 4.5 parts chlorine are reacted at a temperature between 400 and 480 degrees C. The mixture must be heated first to between 550 and 660 degrees C. to initiate reaction, then the heat flow is interrupted. No flames develop. In German. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

PB L 85654. OSTERMAYER and DORRER, E. (Inventors). Preparation of perchloroethylene. (I. G. Farben patent application O. Z. 13825) Dec 1944. 32 p. Price: Microfilm-$1.75 - Photostat-$4.00
Perchloroethylene and trichloroethylene may be prepared by the non-catalytic thermal decomposition of pentachloroethane or by reacting, tetrachloroethane and chlorine at temperatures of 400-500 degrees C. without catalyst in an empty reaction chamber. Optimum yields are 92 percent. In German, with an English summary. Abstract prepared at Headquarters Air Materiel Command, Wright Field, Dayton, Ohio.

Patents—Chemicals (contd)

PB L 83253 REICHSPATENTAMT, BERLIN. A collection of patent applications. (FIAT Microfilm reel B 196, frames 1-1001) 1938-1945. 1001 f. Price: Microfilm-$7.00 - Enlargement print-$103.00.

This FIAT microfilm reel contains 210 German patent applications in the field of organic chemistry, 1929-1945. Individual items, listed below, are available as enlargement prints. Please give PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
1-3 PB L 83253	F. W. BARSCHDORFF (Inventor). Method for producing oil-like substances from sugar beet vinasse. Ger. patent application B 204810, dated Dec 20, 1943. In German.	$ 2.00
4-6 PB L 83253	GUTEHOFFNUNGSHÜTTE. Method for quenching and transporting spent catalyst from the carbon monoxide hydrogenation. Ger. patent application dated Dec 11, 1942. In German.	2.00
7-9 PB L 83253	GLASURIT-WERKE A. G. Method for producing plasticizers. Ger. patent application G 106022, IVa/120, dated Sep 2, 1942. In German.	2.00
10-13 PB L 83253	CARLOS GENNINGER. (Inventor). Method for producing compounds of humic acid and of similar substances. Ger. patent application G 105083 IVa/120, dated Mar 23, 1942. In German. Supplement to application G101831 IVa/120.	2.00
14-16 PB L 83253	CARLOS GENNINGER. (Inventor). Method for producing very water-soluble humus substances which dissolve easily in water, or their decomposition products. Ger. patent application G 105084, dated Mar 23, 1942. In German. Supplement to application G101831 IVa/120.	2.00
17-20 PB L 83253	GESELLSCHAFT FÜR KOHLENTECHNIK M.B.H. Method for obtaining valuable products from lignin or substances containing lignin. Ger. patent application G 103836, dated Jul 21, 1941. In German.	2.00
21-23 PB L 83253	BRENNEREI UND CHEMISCHE WERKE TORNESCH. Method for high-pressure hydrogenation of lignin and substances containing lignin. Ger. patent application B 204099, dated Oct 9, 1943. In German.	2.00
24-27 PB L 83253	BRENNEREI UND CHEMISCHE WERKE TORNESCH. Method for hydrogenation of substances containing lignin. Ger. patent application B 204098, dated Oct 9, 1943. In German.	2.00
28-31 PB L 83253	BRENNEREI UND CHEMISCHE WERKE TORNESCH. Method for hydrogenation of lignin or products containing lignin, by means of hydrogen-releasing agents under addition of elementary hydrogen. Ger. patent application B 204079, dated Oct 9, 1943. In German.	2.00
32-35 PB L 83253	BRENNEREI UND CHEMISCHE WERKE TORNESCH. Method for hydrogenation of lignin without addition of hydrogen. Ger. patent application B 204078, dated Oct 9, 1943. In German.	2.00
36-41 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for obtaining lubricants. Ger. patent application I 70108, dated Jul 22, 1941. In German.	2.00
42 PB L 83253	SCHIMMEL UND CO. A. G. Method for producing aromatic hydroxyaldehydes. Ger. patent application Sch 125661 IVd/12o, dated Sep 4, 1942. In German.	2.00
43-45 PB L 83253	SCHERING A. G. Method for producing aliphatic aldehydes. Ger. patent application dated May 3, 1943. In German.	2.00
46-49 PB L 83253	Method for obtaining sulfonic acids and sulfones. Ger. patent application R 111973, dated Mar 14, 1942. In German.	2.00
50-51 PB L 83253	RUHRCHEMIE A. G. Method for producing organic acids by oxidation of coal. Ger. patent application R 117134, dated Sep 20, 1943. In German.	2.00
52-55 PB L 83253	RUHRCHEMIE A. G. Method for producing aluminum soaps from wax acids. Ger. patent application R 115819 IVd/12o, dated Apr 4, 1943. In German.	2.00
56-59 PB L 83253	Method for producing lubricating oil. Ger. patent R 113424, dated Jul 8, 1942. In German.	2.00
60-63 PB L 83253	RUHRCHEMIE A. G. Method for carrying out nitrations. Ger. patent application R 112904 IVd/12o, dated May 11, 1942. In German.	2.00
64-66 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for performing reactions with substances containing carbon. Ger. patent application I 63282 IVd/12o, dated Dec 23, 1938. In German. Supplement to I 62628 IVd/23b.	2.00
67-73 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for producing aliphatic or araliphatic dicarboxylic acid or their salts. Ger. patent application I 63283 IVd/12o, dated Aug 13, 1942. Inventors: Haussmann, H., Bäumler, R., & Gräfinger, G. In German.	2.00
74-80 PB L 83253	I. G. FARBENINDUSTRIE A.G. Production of organic sulfur compounds. Ger. patent application I 62462 IVd/12o, dated Sep 25, 1940. In German.	2.00
81-84 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for producing wax-like substances. Ger. patent application I 68508 IVd/12o dated Jul 8, 1943. In German.	2.00
85-88 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for producing hydrocarbons. Ger. patent I 62509, dated Sep 23, 1938. In German.	2.00
89-92 PB L 83253	I. G. FARBENINDUSTRIE A. G. Method for producing wax-like	

substances. Ger. patent I 62523, dated Sep 24, 1938. In German. 2.00

93-101 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing liquid motor fuels. Ger. patent I 62731, dated Oct 26, 1938. In German. 2.00

102-109 PB L 83253 — Method for obtaining hydrogenation products of lignin or substances containing lignin. Ger. patent application F 89606 IVc/12o, dated Apr 5, 1941. In German. 2.00

110-118 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for the continuous production of esters. Ger. patent application dated Mar 29, 1945. In German. Drawing. 2.00

119-123 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing alcohols of high molecular weight. Ger. patent I 71469, dated Jan 31, 1942. In German. 2.00

124-128 PB L 83253 — B. JÜTTNER. (Inventor). Method for producing water-soluble carboxylic acids. Ger patent application I 70304, dated Aug 16, 1941. In German. Supplement to application I 66761 IVd/12o. 2.00

129-132 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Production of organic derivatives of sulfuric acid. Ger. patent application I 66084 IVd/12o, dated Dec 5, 1939. In German. 2.00

133-143 PB L 83253 — DEUTSCHE GOLD UND SILBER SCHEIDEANSTALT VORMALS ROESSLER. Method for pressure hydrogenation of substances containing carbon. Ger. patent application D 76866, dated Dec 16, 1937. In German. 3.00

144-146 PB L 83253 — VOGEL, R. B. (Inventor). Method for producing highly viscous plasticizers. Ger. patent application V 39858 IVc/12o, dated Mar 8, 1943. In German. 2.00

147-155 PB L 83253 — VEREINIGTE ÖLFABRIKEN HUBBE UND FARENHOLTZ. Method and device for producing fatty acids from aliphatic hydrocarbons. Ger. patent application V 36427, dated Jan 15, 1940. In German. Supplement to application H 145334 IVc/12o. 2.00

156-172 PB L 83253 — VEREINIGTE ÖLFABRIKEN HUBBE UND FARENHOLTZ. Method for producing fatty acids, alcohols and the like by oxidation of hydrocarbons of high molecular weight. Ger. patent V 34745 IVd/12o, dated Apr 4, 1938. In German. 3.00

173-178 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for catalytic pressure hydrogenation of coals, tars, and mineral oils. Ger. patent application I 69498, dated May 3, 1941. In German. 2.00

179-182 — I. G. FARBENINDUSTRIE A. G.

PB L 83253 — Method for producing anti-knock motor fuels, from hydrocarbon oils with high boiling points. Ger. patent application I 69445, dated Apr 26, 1941. In German. Supplement to application I 67132 IVd/12o. 2.00

183-187 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Processing of mixtures of organic compounds containing oxygen with hydrocarbons, obtained by the reaction of carbon monoxide with hydrogen. Ger. patent application I 69189, dated Mar 20, 1941. In German. 2.00

188-191 PB L 83253 — HOESCH-BENZIN G.M.B.H. Method for improving the effectiveness of catalysts. Ger. patent application H 158604, dated Feb 9, 1939. In German. 2.00

192-195 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing adipic acid. Ger. patent application I 66456 IVd/12o, dated Sep 12, 1941. In German. 2.00

196-200 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing propionaldehyde. Ger. patent application dated Feb 16, 1940. In German. 2.00

201-205 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing adipic acid or its homologues. Ger. patent application I 66513 IVd/12o, dated Feb 11, 1941. In German. 2.00

206-209 PB L 83253 — Method for the removal of polymerization inhibitors from acrylic acid nitrile. Ger. patent application R 110635 IVc/12o, dated Oct 21, 1942. In German. 2.00

210-213 PB L 83253 — DEUTSCHE HYDRIERWERKE A. G. Method for producing alcohols. Ger. patent application D 68809 IVc/12o, dated Nov 18, 1938. In German. 2.00

214-235 PB L 83253 — METALLGESELLSCHAFT A. G. Production of hydrocarbons. Ger. patent application M 143385, dated Nov 15, 1938. In German. 4.00

236-240 PB L 83253 — Method for producing an iron catalyst for gasoline synthesis. Ger. patent application K 154575, dated May 26, 1939. In German. 2.00

241-244 PB L 83253 — KOHLE-UND EISENFORSCHUNG G.M.B.H. Increase of the yield of benzene. Ger. patent application K 160025, dated Jan 31, 1941. In German. 2.00

245-249 PB L 83253 — GUTEHOFFNUNGSHÜTTE. Production of catalysts for the hydrogenation and aromatisation of hydrocarbons. Ger. patent application G 104935, dated Feb 19, 1942. In German. 2.00

250-252 PB L 83253 — GUTEHOFFNUNGSHÜTTE. Method for interrupting oxidative chain reactions, particularly in methane oxidation. Ger. patent application G 104141 IVd/12o, dated Sep 26, 1941. In German. 2.00

253-257 — GESELLSCHAFT FÜR TEERVERWERTUNG

PB L 83253 M.B.H. Method for producing ricsene. Ger. patent application O 109021, dated Mar 7, 1942. In German. 2.00

258-262 PB L 83253 Method for synthesizing anti-knock motor fuels. Ger. patent application B 195189 IVd/23f, dated Aug 2, 1941. In German. 2.00

263-266 PB L 83253 Method for producing esters of polyhydric perhydrogenized cyclic alcohols. Ger. patent application O 26380 IV/12o, dated Jan 3, 1944. In German. 2.00

267-269 PB L 83253 RUHRCHEMIE A. G. Method for producing fatty acids of high molecular weight. Ger. patent application R 108639, dated Oct 31, 1940. In German. 2.00

270-277 PB L 83253 Method for producing hydrocarbons. Ger. patent application M 151312, IVd/12o, dated Jul 5, 194. In German. 2.00

278-284 PB L 83253 MESSR, METMANN & KURZ. (Inventors). Method and equipment for the continuous improving and alkalising of cellulose and for the continuous removal of the solution. Ger. patent application M 158663, dated Sep 22, 1943. In German. 2.00

285-289 PB L 83253 Method for producing cyano-hydrins. Ger. patent application O 25656 IVd/12o, dated Oct 20, 1942. In German. 2.00

290-291 PB L 83253 FRIEDRICH KRUPP. Method for producing alkylchlorides. Ger. patent application dated Feb 2, 1945. In German. 2.00

292-297 PB L 83253 METALLGESELLSCHAFT A.G. Method for reducing iron catalysts. Ger. patent application M 158565, dated Sep 7, 1943. In German. 2.00

298-302 PB L 83253 Catalyst furnace. Ger. patent application M 151275, dated Jun 27, 1941. In German. 2.00

303-309 PB L 83253 MITTELDEUTSCHE STAHLWERKE A. G. Catalyst furnace for the Fisher-Tropsch synthesis. Ger. patent application M 149748, dated Jan 22, 1941. In German. 2.00

310-314 PB L 83253 Method for producing alcohols. Ger. patent application M 147073, dated Feb 12, 1940. In German. 2.00

315-320 PB L 83253 METALLGESELLSCHAFT A. G. Method for catalytic transformation of gas mixtures containing carbon monoxide and hydrogen, into hydrocarbons and similar compounds. Ger. patent application M 136969, dated Jan 23, 1937. In German. 2.00

321-326 PB L 83253 BÖHME FETTCHEMIE G.M.B.H. Method for neutralization of sulfonation products. Ger. patent application B 203892, dated Sep 18, 1943. In German. 2.00

327-330 PB L 83253 BERGHERKSVERBAND ZUR VERWERTUNG VON SCHUTZRECHTEN DER KOHLENTECHNIK G.M.B.H. Method for producing ammonium carbonate. Ger. patent application B 185994 IVe/12o, dated Dec 9, 1940. In German. 2.00

331-335 PB L 83253 RUHRCHEMIE A. G. Method for producing valuable monocarboxylic acids by oxidation of paraffin hydrocarbons with high boiling points. Ger. patent application R 113913 IVd/12o, dated Aug 31 1942. In German. 2.00

336 PB L 83253 DEUTSCHE HYDRIERWERKE A. G. Method for producing 1,5 - dichloropentane. Ger. patent application D 91729, dated Sep 29, 1943. In German. 2.00

337-341 PB L 83253 DEUTSCHE GOLD UND SILBER SCHEIDEANSTALT VORMALS ROESSLER. Method for extracting aliphatic acid, particularly acetic acid. Ger. patent application D 78112, dated Jun 2, 1938. In German. 2.00

342-344 PB L 83253 Method for producing vanillin. Ger. patent application V 39650 IVd/12o, dated Jan 29, 1943. In German. 2.00

345-346 PB L 83253 DEUTSCHE GOLD UND SILBER SCHEIDEANSTALT VORMALS ROESSLER. Method for producing olefins or derivatives. Ger. patent application D 90310, dated Mar 11, 1943. In German. 2.00

347-350 PB L 83253 DEUTSCHE VACUUM ÖL A.G. Method for sulfurization of mouton wax. Ger. patent application D 90632 IVd/12o, dated Apr 28, 1943. In German. 2.00

351-353 PB L 83253 TRUMPLER, C., & REISS, W. (Inventors). Method for obtaining oxidation products of liquid hydrocarbons. Ger. patent I 59797, dated Nov 22, 1943. In German. 2.00

354-359 PB L 83253 I. G. FARBENINDUSTRIE A. G. Method for producing shaped catalysts. Ger. patent application I 66823, dated Apr 5, 1940. In German. 2.00

360-363 PB L 83253 I. G. FARBENINDUSTRIE A. G. Method for producing hydrocarbons. Ger. patent application I 65560, dated Sep 4, 1939. In German. 2.00

364-370 PB L 83253 CHEMISCHE FABRIK R. BAUMBEIER K. G. Method for sulfonating condensation of hydrocarbons. Ger. patent application C 56646 IVd/12o, dated May 30, 1941. In German. 2.00

371-379 PB L 83253 CHEMISCHE FABRIK R. BAUMBEIER K. G. Method for producing sulfonated condensation products of mineral oils. Ger. patent application C 56547 IVd/12o, dated May 30, 1941. In German. 2.00

380-384 PB L 83253 CHEMISCHE WERKE ALBERT. Method for obtaining condensation products of alcohols and ketones. Ger. patent application C 57174 IVe/12o, dated Mar 10, 1942. In German. 2.00

385-387 PB L 83253 CHEMISCHE FABRIK JOH. A. BENCKISER G.M.B.H. Method for obtaining condensation products. Ger. patent application C 58871 IVe/12o, dated Mar 8, 1944. In German. 2.00

388-390 PB L 83253 — Method for producing plasticizers. Ger. patent application M 156446 IVd/12o, dated Jan 11, 1943. In German. 2.00

391-397 PB L 83253 — METALLGESELLSCHAFT A. G. Method for producing gases of great heating power. Ger. patent application M 159172, dated Dec 8, 1923. In German. 2.00

398-401 PB L 83253 — Method for oxidizing hydrocarbons of low molecular weight. Ger. patent application M 159358, dated Jan 12, 1944. In German. 2.00

402-408 PB L 83253 — METALLGESELLSCHAFT A. G. Synthesis of hydrocarbons by means of iron catalysts at atmospheric pressure. Ger. patent application M 159463, dated Jan 26, 1944. In German. 2.00

409-411 PB L 83253 — I. G. FARBENINDUSTRIE A.G. Method for producing organic compounds containing oxygen and sulfur. Ger. patent application dated Feb 2, 1945. In German. 2.00
Supplement to patent 715846.

412-413 PB L 83253 — VON TATARINOW, W., (Inventor). Method for producing acetylene. Ger. patent application dated Mar 11, 1944. In German. 2.00
See also PB 70306.

414-417 PB L 83253 — STEINKOHLENBERGWERK RHEIN-PREUSSEN. Method for producing trihydric alcohols by hydrogenation of dimethylolketones. Ger. patent application St63701, dated Dec 13, 1943. In German. 2.00

418-423 PB L 83253 — STUDIEN UND VERWERTUNGSGESELLSCHAFT M.B.H. Method for transforming hydrocarbons with high into such with lower boiling points. Ger patent application dated Mar 13, 1944. In German. 2.00

424-431 PB L 83253 — FIRMA CARL STILL. Method for the continuous separation of paraffin from oil mixtures containing paraffin. Ger. patent application St 63678, dated Dec 5, 1943. In German. 2.00
Drawing.

432-438 PB L 83253 — SCHEIBLER, H., AND MENZEL, W. (Inventors). Method for producing organic aluminum compounds. Ger. patent application Sch 120852 IVc/12o, dated Aug 8, 1940. In German. 2.00

439-444 PB L 83253 — SCHUBERT, H. (Inventor). Production of soluble lignin transformation products by decomposition of lignin substances of high molecular weight. Ger. patent application Sch 123536 IVc/12o, dated Nov 3, 1941. In German. 2.00

445-446 PB L 83253 — SCHMIDT, A. W. (Inventor). Method for removing halogen from reaction products formed by the use of halogenized hydrocarbons. Ger. patent application Sch 123704, dated Nov 28, 1941. In German. 2.00

447-449 PB L 83253 — SCHRAUTH, W. (Inventor). Method for producing "Ricinenalkohol I". Ger. patent application Sch 117604 IVe/12o, dated Jan 26, 1939. In German. 2.00

450-455 PB L 83253 — DR. ALEXANDER WACKER G.M.B.H. Method for producing surface active agents. Ger. patent application W 113211 IVd/12o, dated May 14, 1943. In German. 2.00

456-458 PB L 83253 — SPENGENBERG-WERKE. Method for obtaining sterines from tall oil or tall oil products containing sterines. Ger. patent application S 143125 IVc/12o, dated Nov 29, 1940. In German. 2.00
Supplement to application S 141127 IVc/12o.

459-463 PB L 83253 — GESELLSCHAFT FÜR KOHLENTECHNIK M.B.H. Method for simultaneous production of plasticisers and pyridine bases. Ger. patent application G 104101, dated Sep 15, 1941. In German. 2.00

464-466 PB L 83253 — GEWERKSCHAFT MATHIAS STINNES. Method for stabilising chlorinated hydrocarbons. Ger. patent application G 104722 IVd/12o, dated Jan 21, 1942. In German. 2.00

467-470 PB L 83253 — JÜTTNER, B. (Inventor). Method for producing carboxylic acids. Ger. patent application I 71388 IVd/12o, dated Jan 15, 1942. In German. 2.00
Supplement to application 65761 IVd/12o.

471-475 PB L 83253 — HENKEL UND CIE. Method for producing solvents and plasticizers. Ger. patent application H 168622, dated Jun 10, 1942. In German. 2.00

476-483 PB L 83253 — HEINZE, R., & HARDER, M. (Inventors). High-pressure oils. Ger. patent application H 171665, dated May 30, 1943. In German. 2.00

484-487 PB L 83253 — HOFFMANN, E. (Inventor). Method for the continuous oxidation of paraffinic hydrocarbons. Ger. patent application H 164747, dated Mar 1, 1942. In German. 2.00

488-496 PB L 83253 — HENKEL UND CIE. Method and apparatus for continuous sulfonation and/or neutralization. Ger. patent application dated Mar 4, 1942. In German. 2.00
Drawing.

497-500 PB L 83253 — GUTEHOFFNUNGSHÜTTE. Method for producing urea. Ger. patent application G 103310, dated Mar 31, 1941. In German. 2.00

501-506 PB L 83253 — BAYERISCHE STICKSTOFFWERKE A. G. Method for producing guanidine carbonate. Ger. patent application B 194629, dated Jun 17, 1941. In German. 2.00

507-509 PB L 83253 — Apparatus for high-temperature chlorination of hydrocarbons. Ger. patent application B 204808, dated Dec 21, 1943. In German. 2.00
Drawing included.

510-515 PB L 83253 — TH. GOLDSCHMIDT A. G. Method for producing polyglycol ethers. Ger. patent application 104288 IVd/12o, dated Oct 28, 1941. In German. 2.00

516-520 — GUTEHOFFNUNGSHÜTTE. Method for

PB L 83253 producing urea. Ger. patent application G 103312, dated Mar 28, 1941. In German. 2.00

521 PB L 83253 BERGWERKSGESELLSCHAFT HIBERNIA A.G. Method for producing ethyl benzene. Ger. patent application B 199585, dated Sep 14, 1942. In German. 2.00

522-528 PB L 83253 BERGWERKSVERBAND ZUR VERWERTUNG VON SCHUTZRECHTEN DER KOHLENTECHNIK G. M.B.H. Method for producing carbon tetrachloride. Ger. patent application B 193471 IVd/12o, dated Mar 1, 1941 and Jan 30, 1945. In German. 2.00

529-531 PB L 83253 BAYERISCHE STICKSTOFFWERKE A.G. Method for producing aminoguanidine sulfate. Ger. patent application B 196069, dated Nov 2, 1941. In German. 2.00

532-533 PB L 83253 VOLKMAN HÖNIG UND COMP. Method for cooling alkali cellulose. Ger. patent application H 168833, dated Jul 3, 1942. In German. 2.00

534-535 PB L 83253 SCHÜTZ, J. (Inventor). Method for speedy esterification of alcohol or liquids containing alcohol. Ger. patent application Sch 128162, dated Oct 7, 1943. In German. 2.00

536-538 PB L 83253 Method for treating sulfonic acids of aliphatic hydrocarbons. Ger. patent application Sch 127845, dated Jul 26, 1943. In German. 2.00

539-540 PB L 83253 VEREINIGTE GLANZSTOFF-FABRIKEN A. G. Method for producing stable acid solutions from formaldehyde and urea. Ger. patent application V 40300 IVc/12o, dated Jul 30, 1943. In German. 2.00
Supplement to application V 38453 IVc/12o.

541-544 PB L 83253 Method for producing nitro compounds. Ger. patent application dated Sep 22, 1943. In German. 2.00

545-547 PB L 83253 Method for producing substitutes for industrial fats. Ger. patent application Sch 128184, dated Oct 8, 1943. In German. 2.00

548-551 PB L 83253 SCHWARZ, J. (Inventor). Method for producing solvents. Ger. patent application Sch 128164, dated Oct 6, 1943. In German. 2.00

552 PB L 83253 WENGER, O. (Inventor). Method for the production of pentane. Ger. patent application W 112232, dated Dec 14, 1942. In German. 2.00

553-554 PB L 83253 SCHAPPGOTSCH-BENZIN G.M.B.H. Method for producing lubricating oils and resins. (Incomplete, claims missing) Ger. patent application Sch 124495, dated Mar 23, 1942. In German. 2.00

555-557 PB L 83253 I. G. FARBENINDUSTRIE A. G. Method for producing condensation products. Ger. patent application I 66317 IVd/12o, dated Oct 30, 1940. In German. 2.00
Supplement to application I 66069 IVd/12o.

558-567 PB L 83253 HÜGEL, G. L. (Inventor). Method for synthesizing lubricating oils. Ger. patent application H 155067, dated Mar 5, 1938. In German. 2.00

568-573 PB L 83253 HENKEL UND CIE. Method for producing surface-active agents. Ger. patent application H 161910, dated Mar 21, 1940. In German. 2.00

574-578 PB L 83253 HENKEL UND CIE. Method for producing alkyl sulfonic acid halides of high molecular weight or their hydrolysation products. Ger. patent application 161908, dated Mar 19, 1940. In German. 2.00

579-582 PB L 83253 HENKEL UND CIE. Method for producing largely uniform carboxylic acids from the aqueous condensation products obtained by cooling the waste gases formed in the oxidation of paraffin hydrocarbons with molecular oxygen or air. Ger. patent application H 170768 IVd/12o, dated Feb 5, 1943. In German. 2.00

583-585 PB L 83253 HILDEBRAND, F., AND MEINER, K. (Inventors). Method for starting syntheses by the use of electromagnetic oscillations. Ger. patent application H 169015, dated Jul 23, 1942. In German. 2.00

586-589 PB L 83253 I. G. FARBENINDUSTRIE A. G. Method for dehydrogenation of alcohols. Ger. patent application I 68711, dated Jan 22, 1941. In German. 2.00

590-594 PB L 83253 RUHRCHEMIE A. G. Method for activating catalysts for the carbon monoxide hydrogenation. Ger. patent application R 104999, dated Apr 15, 1939. In German. 2.00

595-612 PB L 83253 FIRMA CARL STILL. Method and apparatus for obtaining hydrocarbons of low boiling points from gases by means of absorption. Ger. patent application St 63783, dated Jan 10, 1944. In German. 3.00

613-616 PB L 83253 STEINKOHLENBERGWERK RHEIN-PREUSSEN. Method for activating iron catalysts. Ger. patent application St 63636, dated Nov 22, 1943. In German. 2.00

617-619 PB L 83253 SCHUMACHER, H. J., AND STAUFF, J. (Inventors). Thermal halogenation and sulfohalogenation of hydrocarbons by means of organic peroxides. Ger. patent application Sch 125293, dated Jul 16, 1942. In German. 2.00

620-632 PB L 83253 SCHUBERT, H. (Inventor). Method for obtaining wood polysaccharides from wood, straw, and other vegetable materials. Ger. patent application Sch 125271, dated Jul 13, 1942. In German. 3.00

633-635 PB L 83253 SCHWARZ, H. (Inventor). Method for producing aromatic hydrocarbons. Ger. patent

application Sch 127139 IVd/12o, dated Mar 30, 1943. In German. 2.00

636-638 PB L 83253 — Metal carboxyls as catalysts for paraffin oxidation. Ger. patent application R 117781, dated Dec 20, 1943. In German. 2.00

639-642 PB L 83253 — HENKEL UND CIE. Method for producing high molecular weight sulfuric acid derivatives of organic compounds. Ger. patent application H 130602, dated Feb 12, 1932. In German. 2.00

643-645 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing higher alcohols. Ger. patent application I 71066, dated Dec 9, 1941. In German. 2.00

646-647 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing 1,4-dichlorobutane and 4,4'-dichlorobutylether. Ger. patent application I 65187 IVd/12o, dated Jul 19, 1939. In German. 2.00

648-657 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for performing catalytic reactions with substances containing carbon. Ger. patent application I 66694, dated Mar 14, 1940. In German. 2.00

658-665 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Process for oxidation products containing carboxylic acids. Ger. patent application I 66643, dated Mar 7, 1940. In German. 2.00

666-671 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing carboxylic acids or their funotional derivatives. Ger. patent application I 66592, dated Feb 27, 1940. In German. 2.00

672-676 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for obtaining xylan. Ger. patent application I 65826, dated Oct 18, 1939. In German. 2.00

677-680 PB L 83253 — ZSCHIMMER AND SCHWARZ-CHEMISCHE FABRIK DOLAU. Method for producing aliphatic alcohols and olefins. Ger. patent application Z 26743, dated Nov 12, 1941. In German. 2.00

681-684 PB L 83253 — BAYERISCHE STICKSTOFFWERKE. Method for producing acetylene hydrocarbons. Ger. patent application B 196683, dated Jan 7, 1942. In German. 2.00

685-687 PB L 83253 — BERGWERKSVERBAND ZUR VERWERTUNG VON SCHUTZRECHTEN DER KOHLENTECHNIK G.M.B.H. Method for producing unsaturated hydrocarbons. Ger. patent application B 187292, dated May 5, 1939. In German. 2.00

688-694 PB L 83253 — BOSSE, A. (Inventor). Method for producing light peat cellulose from crude peat. Ger. patent application B 175894, dated Oct 20, 1936. In German. 2.00

695-700 PB L 83253 — ASCHAFFENBURGER ZELLSTOFFWERKE A. G. Processing of cellulose waste liquors. Ger. patent application A 90175, dated Aug 31, 1939. In German. 2.00

701-703 PB L 83253 — DEUTSCHE HYDRIERWERKE A. G. Method for producing alkylsulfonic acid halides of high molecular weight or their hydrolization products. Ger. patent application D 81925, dated Jan 19, 1940. In German. 2.00

704-710 PB L 83253 — DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER. Method for producing valuable substances, particularly lubricants, from raw materials containing terpenes. Ger. patent application D 81633, dated Dec 2, 1939. In German. 2.00

711-715 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Method for producing compounds containing sulfamide groups. Ger. patent application I 62924 IVd/12o, dated Jun 12, 1941. In German. 2.00

716-718 PB L 83253 — O. H. BOEHRINGER SOHN. Method for producing solid lactic acid preparations. Ger. patent application B 201136, dated Jan 25, 1943. In German. 2.00
Supplement to application B 182843 IVd/12o.

719-724 PB L 83253 — BRANDT, K. (Inventor). Method for the amidation of organic compounds containing hydroxyl. Ger. patent application B 180729 IVe/12o, dated Nov 12, 1937. In German. 2.00
Supplement to application B 175750 IVe/12g.

725-734 PB L 83253 — BRANDT, K. (Inventor). Method for the amidation of organic compounds containing hydroxyl. Ger. patent application B 183644, dated Jun 24, 1938. In German. 2.00
Supplement to B 175750 IVe/12g and to B 180729 IVe/12o (Preceding item).

735-736 PB L 83253 — Auxiliary products for the dyeing, textile, metal, paper, and leather industries. Ger. patent application 12o[4] B 1154/30, dated Sep 5, 1930. In German. 2.00

737-739 PB L 83253 — BRENNEREI UND CHEMISCHE WERKE TORNESCH G.M.B.H. Method of neutralization and purification of simple or mixed ethers of the fatty series. Ger. patent application dated Nov 4, 1943. In German. 2.00

740-742 PB L 83253 — SCHERING A. G. Method for producing salts of alginic acid. Ger. patent Sch 127724, dated Jul 5, 1943. In German. 2.00

743-745 PB L 83253 — Method for processing spent catalysts for carbonmonoxide hydrogenation. Ger. patent application B 201899, dated Mar 23, 1943. In German. 2.00

746-751 PB L 83253 — BAYERISCHE STICKSTOFFWERKE A.G. Method for producing, from dicyanodiamide and formaldehyde, powders for molding purposes. Ger. patent application B 175439 IVe/12o, dated Sep 8, 1936. In German. 2.00

752-753 — DR. ALEXANDER WACKER G.M.B.H.

PB L 83253 — Method for simultaneous production of butylalcohol and butyraldehyde from crotonaldehyde. Ger. patent application W 112201 IVd/12o, dated Dec 10, 1942. In German. 2.00

754-756 PB L 83253 — SCHERING A. G. Method for producing alginate solutions. Ger. patent application Sch 127663, dated Jun 28, 1943. In German. 2.00

757-759 PB L 83253 — SCHERING A. G. Method for producing alginates and alginic acids. Ger. patent application Sch 127662, dated Jun 26, 1943. In German. 2.00

760-763 PB L 83253 — SCHERING A. G. Method for producing cellulose esters. Ger. patent application Sch 125897 IVc/12o, dated Oct 13, 1942. In German. 2.00

764 PB L 83253 — Method for catalytic hydrogenation of lactones of the sugar series. Ger. patent application Sch 126711 IVd/12o, dated Jan 30, 1943. In German. 2.00

765-768 PB L 83253 — Process for direct production of viscose from substances containing cellulose and decomposed by means of alkali. Ger. patent application dated Jun 19, 1941. In German. 2.00

769-772 PB L 83253 — Continuous process for ripened alkali cellulose from cellulose pulp obtained by alkaline boiling. Ger. patent application Sch 113411, dated Jul 24, 1937. In German. 2.00

773-774 PB L 83253 — HERMANN SCHUBERT TEXTILWERKE. Method for producing alkali lignin. Ger. patent application Sch 119338, dated Oct 7, 1939. In German. 2.00

775-776 PB L 83253 — Production of colloids from wood saccharification incrustations. Ger. patent application L 107811 IVd/12o, dated May 6, 1942. In German. 2.00

777-782 PB L 83253 — VEREINIGTE GLANZSTOFF-FABRIKEN A. G. Method of producing sulfonated products from petroleum. Ger. patent application V 33558 IVd/12o, dated Dec 30, 1938. In German. 2.00

783-790 PB L 83253 — VEREINIGTE ÖLFABRIKEN HUBBE UND FARENHOLTZ. Process for producing oxidation products, particularly fatty acids, from materials containing chiefly paraffin-hydrocarbons. Ger. patent application V 40421, dated Sep 7, 1943. In German. 2.00

791-793 PB L 83253 — NORD, F. F. (Inventor). Method for producing aqueous solutions of phosphoric acid esters of sugars, particularly phosphoric acid esters of pentose. Ger. patent application Z 23532 IVc/12o, dated Oct 24, 1940. In German. 2.00

794-801 PB L 83253 — Method for transforming normal pentane into iso pentanes. Ger. patent application U 14715 IVd/12o, dated Apr 12, 1939. In German. 2.00

802-805 PB L 83253 — WAGNER-MAASS, W. (Inventor). Method for hydrolyzing macromolecular esters. Ger. patent application W 110223, dated Dec 30, 1941. In German. 2.00

806-808 PB L 83253 — STAUER, O. E. (Inventor). Method for separating the various sulfonation products of a paraffin sulfochloride. Ger. patent application St 62261 IVd/12o, dated Sep 15, 1942. In German. 2.00

809-811 PB L 83253 — RUHRCHEMIE A. G. Method for producing highly anti-knock motor fuels. Ger. patent application R 106921, dated Feb 6, 1940. In German. 2.00

812-815 PB L 83253 — CHEMISCHE WERKE HÜLS G.M.B.H. Method for producing compounds containing oxygen. Ger. patent application dated Mar 29, 1945. In German. 2.00

816-821 PB L 83253 — RÖCHLINGSCHE EISEN- UND STAHLWERKE. Process for producing ethylenechlorohydrine from coal gases and other gases containing ethylene. Ger. patent application R 102795 IVd/12o, dated Jul 7, 1938. In German. 2.00

822-827 PB L 83253 — ERNST SCHLIEMANN'S EXPORT-CERESIN-FABRIK. Method for producing acids of high molecular weight. Ger. patent application Sch 127682 IVd/12o, dated Jun 30, 1943. In German. 2.00

828-834 PB L 83253 — STEINKOHLEN-BERGWERK RHEIN-PREUSSEN. Method for producing anti-knock motor fuels. Ger. patent application St 60337 IVd/12o, dated Dec 24, 1940. In German. 2.00

835-840 PB L 83253 — STEINKOHLEN-BERGWERK RHEIN-PREUSSEN. Method for producing lubricant oils. Ger. patent application St 60284, dated May 2, 1941. In German. 2.00

841-847 PB L 83253 — STEINKOHLEN-BERGWERK RHEIN-PREUSSEN. Method for producing catalysts. Ger. patent application St 58750, dated May 26, 1939. In German. 2.00
Third supplement of application St 57727 IVb/12o.

848-851 PB L 83253 — STUDIEN- UND VERWERTUNGS-GESELLSCHAFT M.B.H. Method for producing paraffin. Ger. patent application St 56469 dated Jul 29, 1937. In German. 2.00

852-861 PB L 83253 — STEINKOHLEN-BERGWERK RHEIN-PREUSSEN. Utilization and production of iron oxides as catalysts for carbon monoxide hydrogenation. Ger. patent application St 60623, dated Apr 1, 1941. In German. 2.00

862-868 PB L 83253 — STEINKOHLEN-BERGWERK RHEIN-PREUSSEN. Method for performing the carbon monoxide hydrogenation on iron catalysts in a liquid medium. Ger. patent application St 61846 IVd/12o, dated Apr 3, 1943. In German. 2.00

869-872 PB L 83253 — STUDIEN- UND VERWERTUNGS-GESELLSCHAFT M.B.H. Method

for producing hydrocarbons from carbon monoxide and hydrogen. Ger. patent application St 60409, dated Jan 22, 1941. In German. 2.00

873-875 PB L 83253 RUHRCHEMIE A. G. Method for producing valuable oxo compounds. Ger. patent application R 106853 IVd/12o, dated Jan 26 1940. In German. 2.00
Supplement to application R 103362 IVd/12o.

876-878 PB L 83253 RUHRCHEMIE A. G. Method for producing alcohols, aldehydes, and ketones from water gas or similar gas mixtures. Ger. patent application R 106854, dated Jan 29, 1940. In German. 2.00

879-882 PB L 83253 RUHRCHEMIE A. G. Method for producing solvents or plasticizers. Ger. patent application R 106771 IVd/12o, dated Jan 17, 1940. In German. 2.00

883-886 PB L 83253 RUHRCHEMIE A. G. Method for obtaining, from aliphatic hydrocarbons, pure derivatives containing oxygen, particularly fatty acids or alcohols. Ger. patent application R 106852, dated Jan 24, 1940. In German. 2.00

887-888 PB L 83253 RUHRCHEMIE A. G. Method for producing catalysts for the gasoline synthesis. Ger. patent application R 106936, dated Feb 10, 1940. In German. 2.00

889-890 PB L 83253 RUHRCHEMIE A.G. Method for producing resins and resin-like substances. Ger. patent application R 106772 IVe/12o, dated Jan 17, 1940. In German. 2.00

891-895 PB L 83253 Method for processing, before or after fermentation, the preliminary hydrolyzation products obtained in the cellulose process by a preliminary acid treatment of the raw materials which contain cellulose. Ger. patent application P 84036 IVd/12o, dated Apr 4, 1942. In German. 2.00

896-901 PB L 83253 STEINKOHLEN-BERGWERK RHEINPREUSSEN. Method for producing lubricating oils. Ger. patent application St 60695, dated May 7, 1941. In German. 2.00

902-908 PB L 83253 RUHRCHEMIE A. G. Method for producing lubricating oils. Ger. patent application R 94081, dated Aug 24, 1935. In German. 2.00

909-911 PB L 83253 RUHRCHEMIE A. G. Method for obtaining acetylene from gases containing acetylene. Ger. patent application R 98643, dated Feb 20, 1937. In German. 2.00
Supplement to application R 95631 IVe/12o.

912-918 PB L 83253 PHRIX-ARBEITSGEMEINSCHAFT. Method for producing ripened alkali cellulose. Ger. patent application R 103856 IVe/12o, dated Oct 1, 1941. In German. 2.00

919-922 PB L 83253 RUHRCHEMIE A. G. Method for producing a kieselguhr suitable as carrier substance for catalysts to be used in the hydrogenation of carbon monoxide. Ger. patent application R 103980, dated Dec 5, 1938. In German. 2.00

923-924 PB L 83253 DR. ALEXANDER WACKER G.M.B.H. Method for chlorinating in the presence of iron chloride. Ger. patent application dated Jan 24, 1942. In German. 2.00

925-926 PB L 83253 CHEMISCHE FABRIK STOCKHAUSEN UND CIE. Method for producing water-soluble condensation products from sugars and paraformaldehyde. Ger. patent application C 57902, dated Dec 21, 1942. In German. 2.00

927-932 PB L 83253 STEINKOHLEN-BERGWERK RHEINPREUSSEN. Method for producing activated aluminum oxide catalysts. Ger. patent application St 59894, dated Jul 27, 1940. In German. 2.00
Supplement to application St 59655 IVb/12m.

933-936 PB L 83253 RUHRCHEMIE A. G. Method for catalytic polymerization of olefin mixtures containing ethylene. Ger. patent application R 104047, dated Dec 13, 1938. In German. 2.00

937-938 PB L 83253 FIRMA KARL FISCHER. Method for producing formaldehyde solutions. Ger. patent application F 92065, dated Jun 30, 1942. In German. 2.00

939-940 PB L 83253 DEUTSCHE HYDRIERWERKE. Plasticizers for shellac, copal, synthetic resins and the like. Ger. patent application D 76798 IVd/12o, dated Dec 10, 1937. 2.00

941-943 PB L 83253 DEUTSCHE HYDRIER WERKE. Method for producing soap-forming fatty acids of high molecular weight or their salts. Ger. patent application D 81245, dated Sep 22, 1939. In German. 2.00

944-946 PB L 83253 DEUTSCHE HYDRIERWERKE A. G. Method for producing mixed halo-nitro- paraffins of high molecular weight. Ger. patent application D 85321, dated Jun 24, 1941. In German. 2.00

947-951 PB L 83253 DEUTSCHE GOLD- UND SILBER-SCHEIDEANSTALT VORMALS ROESSLER. Method for obtaining acrolein. Ger. patent application D 78635 dated Aug 9, 1938. In German. 2.00

952-956 PB L 83253 I. G. FARBENINDUSTRIE A. G. Separation of hydrogenchloride from olefins or diolefins. Ger. patent application I 62239, dated Aug 15, 1936. In German. 2.00

957-959 PB L 83253 DEUTSCHE HYDRIERWERKE A. G. Method for producing quaternary ammonium compounds. Ger. patent application D 76246 IVe/12o, dated Oct 1, 1937. In German. 2.00

960-963 PB L 83253 I. G. FARBENINDUSTRIE A. G. Production of butadiene and its homologues. Ger. patent application I 63223, dated Dec 19, 1938. In German. 2.00

964-967 PB L 83253 — I. G. FARBENINDUSTRIE A.G. Production of acylated diamines. Ger. patent application I 83193 IVd/12o, dated Dec 15, 1938. In German. 2.00

968-969 PB L 83253 — I. G. FARBENINDUSTRIE A. G. Production of diolefins. Ger. patent application I 83101, dated Dec 7, 1938. In German. 2.00

970-973 PB L 83253 — STEINKOHLENBERGWERK RHEIN-PREUSSEN. Method for producing iron catalysts. Ger. patent application St 59723, dated Nov 27, 1942. In German. 2.00

974-978 PB L 83253 — RUHRCHEMIE A. G. Method for producing hydrocarbons of high molecular weight. Ger. patent application R 95050 IVd/12o, dated Mar 11, 1939. In German. 2.00

979-981 PB L 83253 — RUHRCHEMIE A. G. Method for the regeneration of catalysts for carbon monoxide hydrogenation. Ger. patent application R 103713, dated Nov 7, 1938. In German. 2.00
Supplement to application R 97394 IVc/12o.

982-988 PB L 83253 — RUHRCHEMIE A. G. Production of unsaturated hydrocarbons, particularly acetylene, by a short thermal treatment of hydrocarbons with a higher hydrogen content. Ger. patent application R 96765, dated Oct 28, 1941. In German. 2.00

989-990 PB L 83258 — SCHMIDT, A. W. (Inventor). Method for stabilizing unstable halogen - hydrocarbon mixtures. Ger. patent application Sch 123728 dated Nov 25, 1941. In German. 2.00

991-1001 PB L 83258 — MORELLO, G. (Inventor). Method and apparatus for continuous extraction. Ger. patent application M 150032 IVb/12o, dated Feb 19, 1941. In German. 2.00
Drawing.

ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES

PB L 83249. REICHSPATENTAMT, BERLIN. German patent applications class 21c: power transmission, generating equipment, switches, circuit breakers etc. (FIAT Microfilm Reel B 102, Frames 7272-8192) 1934-1945. 934 f.
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Frames	Title	Price
7272-7281 PB L 83249	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Thermal time relay. Ger. patent application S 129788 VIIIb/21c 44, dated Nov 30, 1939. In German. Drawings.	$2.00
7282-7288 PB L 83249	SIEMENS & HALSKE A.G., BERLIN. Socket with spring action. Ger. patent application S 129835, dated Dec 3, 1937. In German. Drawings.	2.00
7289-7294 PB L 83249	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method of influencing regulating and controlling devices by weak d-c voltages. Ger. patent application S 115898 VIIIb/21c 46/51, dated Sep 14, 1938. In German.	2.00
7295-7300 PB L 83249	RUPPEL, F. (Inventor). Spring operated high-voltage switch. Ger. patent application R 95904 VIIIb/21c, dated Oct 16, 1936. In German. Drawings.	2.00
7301-7308 PB L 83249	SIEMENS & HALSKE A.G., BERLIN. Terminal equipment for high-voltage rubber insulated cables. Ger. patent application S 134553, dated Nov 10, 1938. In German.	2.00
7309-7312 PB L 83249	RITSCHER, W. (Inventor). Socket. Ger. patent application R 103765 VIIIb/21c 22, dated Mar 17, 1939. In German. Drawings.	2.00
7313-7319 PB L 83249	Compressed air circuit breaker. Ger. patent application R 94914 VIIIb/21c 35, dated Dec 5, 1935. In German.	2.00
7320-7325 PB L 83249	Electric circuit breaker filled with conductive liquid. Ger. patent application R 93904 VIIIb/21c 36/02, dated Jun 17, 1937. In German. Drawings.	2.00
7326-7332 PB L 83249	RUPPEL, F. (Inventor). High-voltage switching equipment in a metallic housing. Ger. patent application R 84885 VIIIb/21c 40/03, dated Nov 9, 1938. In German. Drawings.	2.00
7333-7342 PB L 83249	RIBAU G.M.B.H., BERLIN. Time relay. Ger. patent application R 100038 VIIIb/21c 44, dated May 27, 1938. In German. Drawings.	2.00
7343-7351 PB L 83249	TELEFUNKEN GESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIE M.B.H., BERLIN. Arrangement for d-c voltage stabilization. Ger. patent application T 53169 VIIIb/21e, dated Jun 5, 1941. In German. Diagrams.	2.00
7352-7359 PB L 83249	WACKER, R. (Inventor). Drive for electrically operated jarring machines or the like. Ger. patent application W 112378, dated Jan 7, 1943. In German. Drawings.	2.00
7360-7363 PB L 83249	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for stranding telecommunication cables. Ger. patent application S 156489, dated Jul 13, 1943. In German. Drawing.	2.00
7364-7368 PB L 83249	SIEMENS & HALSKE A.G., BERLIN. Electric fine-wire resistor, especially for potentiometers. Ger. patent application S 156252 VIIIb/21c, dated Jun 24, 1943. In German. Drawing.	2.00
7369-7371 PB L 83249	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric power transmission station. Ger. patent application S 158307 VIIIb/21c 3/01, dated Dec 15, 1943. In German.	2.00
7372-7377 PB L 83249	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Twisting device for wire ends. Ger. patent application S 158271 VIIIb/21c 20, dated Dec 15, 1943. In German.	2.00

7378-7381 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for preventing corrosion of aluminum cable sheaths. Ger. patent application S 160104 VIIIb/21c, dated Jun 27, 1944. In German. 2.00

7382-7384 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing insulating or protective sleeves on electric conductors of rubber or similar material. Ger. patent application S 160111 VIIIb/21c, dated Jun 28, 1944. In German. 2.00

7385-7386 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Contact cable. Ger. patent application S 160112 VIIIb/21c, dated Jun 28, 1944. In German. 2.00

7387-7395 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for automatic setting of stepwise controlled organs based on an arbitrary reference point. Ger. patent application S 155833 VIIIb/21c 46, dated May 29, 1943. In German. 2.00 Diagrams.

7396-7401 PB L 83249 VEREINIGTE DEUTSCHE METALLWERKE A.G., MANNHEIM. Material for cold-casting of electrical fittings and the like. Ger. patent application V 38728, dated Apr 28, 1942. In German. 2.00

7402-7405 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Interchangeable housing for electric switches. Ger. patent application S 157365 VIIIb/21c 69, dated Sep 23, 1943. In German. 2.00 Supplement to S 155001 VIIIb/21c.

7406-7408 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Release for electric switches, especially motor safety switches. Ger. patent application S 157369 VIIIb/21c 69, dated Sep 25, 1943. In German. 2.00

7409-7417 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Automatic regulator. Ger. patent application S 157370 VIIIb/21c 46/50, dated Sep 25, 1943. In German. 2.00

7418-7422 PB L 83249 SACHSENWERK LICHT UND KRAFT A.G., NIEDERSEDLITZ-DRESDEN. Method for insulating thin wires. Ger. patent application S 157371 VIIIb/21c, dated Sep 27, 1943. In German. 2.00 Drawing.

7423-7429 PB L 83249 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Arrangement for electromotive adjustment of heavy objects. Ger. patent application S 156257 VIIIb/21c, dated Jun 30, 1943. In German. 2.00 Diagram.

7430-7435 PB L 83249 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Automatic voltage regulator. Ger. patent application S 156266, dated Jun 28, 1943. In German. 2.00 Drawing.

7436-7439 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Resistor with extremely high capacitance. Ger. patent application S 156269 VIIIb/21c 54/05, dated Jun 25, 1943. In German. 2.00

7440-7443 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Outdoor switching installation with hollow busbars. Ger. patent application S 156395 VIIIb/21c, dated Jul 3, 1943. In German. 2.00 Drawing.

7440A-7440I PB L 83249 VEREINIGTE DEUTCHE METALLWERKE A.G., MANNHEIM. Insulating mass for filling or impregnating cables solidifying by polymerisation. Ger. patent application V 38729 VIIIb/21c 2, dated Apr 28, 1942. In German. 2.00 Diagram.

7441A-7441D PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Outdoor switching equipment with hollow conductors. Ger. patent application S 156395 VIIIb/21c, dated Jul 3, 1943. In German. 2.00 Drawing.

7444-7448 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing bimetallic conductors with a thin, wall-conductive coating, especially for the transmission of high frequencies up to 1000 kilocycles. Ger. patent application S 156399 VIIIb/21c, dated Jul 5, 1943. In German. 2.00 Drawings.

7448A-7453 PB L 83249 SIEMENS-SCHUCKERTWERKE A. G., BERLIN. High-voltage switching equipment with columnar circuit breakers. Ger. patent application S 136747, dated Apr 13, 1939. In German. 2.00 Drawings.

7454-7464 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Safety device for two or more motor drives with Ward-Leonard control. Ger. patent application S 140843 VIIId/21c 62/01, dated Apr 24, 1940. In German. 3.00 Diagram.

7465-7468 PB L 83249 TELEFUNKEN GESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIC M.B.H., BERLIN. Coaxial cable. Ger. patent application T 59714 VIIIb/21c 5/03, dated Oct. 23, 1943. In German. 2.00

7469-7475 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Plug with several poles, especially for electrically controlled weapons. Ger. patent application S 157348 VIIIb/21c, dated Sep 25, 1943. In German. 2.00 Drawings.

7476-7480 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Method for improving the dielectric strength of nonconductive metallic compounds. Ger. patent application S 157335 VIIIb/21c, dated Sep 23, 1943. In German. 2.00

7481-7486 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Switching arrangement for closing a circuit by mechanical contacts, especially for periodically operating circuits, e.g. for converting purposes. Ger. patent application S 157331 VIIIb/21c 35, dated Sep 16, 1943. In German. 2.00

7487-7491 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Method for equalizing the resistance of laminated resistors. Ger. patent application S 162370 VIIIb/21c, dated Jan 7, 1945. In German. 2.00

7492-7495 PB L 83249 ZIELSTORFF, W. (Inventor). Arrangement for stripping the ends of insulated conductors. Ger. patent application Z 26444, dated May 28, 1941. In German. 2.00

7496-7501 PB L 83249 STUDIENGESELLSCHAFT FÜR HOCHLEISTUNGSCHALTER M.B.H., BERLIN. Rapid disconnect switch. Ger. patent application S 62862 VIIIb/21c 35, dated Mar 12, 1943. In German. 2.00

7502-7507
PB L 83249
STASSFURTER RUNDFUNK-GESELLSCHAFT M.B.H., STASSFURT. Circuit arrangement for relieving distortion caused by arcing between switch contacts. Ger. patent application St 62863 VIIIb/21c 35, dated Mar 13, 1943. In German. 2.00

7508-7513
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Circuit breaker for indoor and outdoor power equipment. Ger. patent application S 140864, dated Apr 20, 1940. In German. 2.00
Drawing.

7514-7520
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Variable resistor. Ger. patent application S 145820 VIIIb/21c 54, dated Feb 27, 1943. In German. 2.00
Drawing.

7521-7527
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Releasing device. Ger. patent application S 145822 VIIIb/21c 35, dated Jun 19, 1941. In German. 2.00
Drawing.

7528-7533
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Method for increasing the capacitance of cable strands with thermoplastic insulation. Ger. patent application S 140824, dated Apr 23, 1940. In German. 2.00

7534-7541
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Cable sheaths of metallic or dielectric materials. Ger. patent application, dated Apr 23, 1940. In German. 2.00

7542-7558
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Automatic control for motors used for rolling, milling or reeling band-shaped materials. Ger. patent application S 140838 VIIIb/21c 62/60, dated Jul 29, 1943. In German. 3.00
Diagrams.

7559-7564
PB L 83249
MICHELS & CO., ST. VIT-NIEDENBRÜCK (WESTFALEN). Arrangement for spraying plastic or thermoplastic materials, especially on wires and other electric conductors. Ger. patent application M 159776 VIIIb/21c, dated Mar 4, 1944. In German. 2.00
Drawing.

7565-7568
PB L 83249
MENZ, W. (Inventor). Cable clamp. Ger. patent application M 158317 VIIIb/21c, dated Jul 30, 1943. In German. 2.00
Drawing.
Supplement to M 155290 VIIIb/21c.

7569-7573
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Low-voltage switching equipment. Ger. patent application S 137359 VIIIb/21c 27/03, dated Jun 15, 1941. In German. 2.00
Drawing.

7574-7579
PB L 83249
SIEMENS-SCHUCKERWERKE A.G., BERLIN. Control arrangement for electric motors. Ger. patent application S 126717 VIIIb/21c 59/55, dated Aug 15, 1938. In German. 2.00
Drawing.

7580-7593
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. High-voltage circuit breaker. Ger. patent application S 126752 VIIIb/21c 27/03, dated Jan 8, 1940. In German. 3.00
Drawings.

7594-7599
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Spring-type pin for electric plugs. Ger. patent application S 126755, dated Apr 7, 1937. In German. 2.00

7600-7604
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Rapid mechanical switch. Ger. patent application S 126776 VIIIb/21c 74/38, dated Apr 12, 1939. In German. 2.00

7605-7609
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method of connecting tubular fibrous or ceramic parts without the use of cement. Ger. patent application S 126835 VIIIb/21c 36, dated Apr 13, 1937. In German. 2.00
Drawings.
Supplement to S 125165 XII/47a.

7610-7614
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Terminal box with one or more metallic clamps for cables or other conductors. Ger. patent application S 154996 VIIIb/21c, dated Apr 7, 1943. In German. 2.00
Drawing.

7615-7622
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Completely sealed lead-in with rubber insulation. Ger. patent application S 159680 VIIIb/21c, dated May 15, 1944. Inventor: Thalmayer. In German. 2.00
Drawings.

7623-7626
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Lead-in for one or several cables into a housing. Ger. patent application S 159689 VIIIb/21c, dated May 13, 1944. Inventor: Mickoleit. In German. 2.00
Drawing.

7627-7630
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for starting shunt motors. Ger. patent application S 159664 VIIIb/21c 57, dated May 10, 1944. In German. 2.00
Drawing.

7631-7635
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Control arrangement for electric motors. Ger. patent application S 140039 -21c, dated Feb 5, 1940. In German. 2.00

7636-7642
PB L 83249
SIEMENS & HALSKE A.G., BERLIN. Portable telecommunication cable. Ger. patent application S 140037, dated Feb 6, 1940. In German. 2.00

7643-7649
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Overvoltage switch. Ger. patent application S 141344 VIIIb/21c 69, dated Mar 7, 1940. In German. 2.00
Drawing.

7650-7660
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Overvoltage switch for automatic and manual operation. Ger. patent application S 141543 VIIIb/21c 69, dated Mar 7, 1940. In German. 3.00
Drawing.
Supplement to 125694 VIIIb/21c.

7661-7667
PB L 83249
SÜDDEUTSCHE KABELWERKE A.G., MANNHEIM. High-voltage transmission line with single or multilayer fiber insulation. Ger. patent application S 141565, dated Jul 6, 1940. In German. 2.00

7668-7675
PB L 83249
SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for coaxial application of one or more insulating bands on electric conductors. Ger. patent application S 141571, dated Jul 6, 1940. In German. 2.00

7676-7679
PB L 83249
SACHSENWERKE, LICHT UND KRAFT A.G., NIEDERSEDLITZ-DRESDEN. Lever system for polyphase high-voltage switches. Ger. patent application S 157742 VIIIb/21c 46/50, dated Oct 25, 1943. In German. 2.00

7680-7686 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Winding for d-c generators. Ger. patent application S 157737 VIIIb/21c 62/60, dated Oct 27, 1943. In German. 2.00
Supplement to S (no number).

7687-7689 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Connection for aluminum cables. Ger. patent application S 158102 VIIIb/21c 21/01, dated Nov 22, 1943. In German. 2.00

7690-7693 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Overhead high-voltage power transmission system consisting partly of enclosed units. Ger. patent application S 156642 VIIIb/21c, dated Jul 20, 1943. In German. 2.00
Drawing.

7694-7696 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. D-c power line. Ger. patent application S 154476, dated Mar 5, 1943. In German. 2.00

7697-7700 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric cable armored with spirally wound metal bands. Ger.patent application S 154477, dated Mar 5, 1943. In German. 2.00
Drawing.

7701-7702 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Arrangement for achieving the desired voltage-current ratio by means of pyroelectric conductors. Ger. patent application S 115866 VIIIb/21c 54, dated Oct 23, 1934. In German. 2.00
Supplement to S 114205 VIIIb/21c.

7703-7708 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric lead-in insulator. Ger. patent application S 115795 VIIIb/21c 10/03, dated Aug 26, 1939. In German. 2.00
Drawing.

7709-7712 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Clamp. Ger. patent application S 153918 VIIIb/21c, dated Jan 28, 1943. In German. 2.00
Drawing.

7713-7718 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for control of d-c voltages or currents. Ger. patent application S 155423 VIIIb/21c 68, dated Apr 27, 1943. In German. 2.00
Diagram.

7719-7729 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Lead-in clamp for several conductors. Ger. patent application S 106490 VIIIb/21c 10/03, dated Jul 30, 1934. In German. 3.00
Drawing.

7730-7732 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Cable terminal. Ger. patent application S 154478, dated Mar 5, 1943. In German. 2.00
Drawing.

7733-7737 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Overload circuit breaker especially for motor guard switches. Ger. patent application S 156366 VIIIb/21c 69, dated Jul 1, 1943. In German. 2.00
Drawings.

7738-7751 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Wind power station with a d-c generator. Ger. patent application S 156367 -21c, dated Jul 3, 1943. In German. 3.00
Diagrams.

7752-7755 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Thermoelectric release. Ger. patent application S 156368 VIIIb/21c 69, dated Jul 5, 1943. In German. 2.00
Drawing.

7756-7760 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. High-voltage switching installation with multiple busbars. Ger. patent application S 157329 VIIIb/21c, dated Sep 22, 1943. In German. 2.00

7761-7772 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Maximum safety high-voltage circuit breaker. Ger. patent application S 157328 VIIIb/21c, dated Sep 22, 1943. In German. 3.00

7773-7776 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Suspension carriage for inspection and repair of overhead lines. Ger. patent application S 153917 VIIIb/21c 8, dated Jan 28, 1943. In German. 2.00

7777-7787 PB L 83249 MEHNE (I.G.) G.M.B.H., SCHWERINGEN A.N. Watt-hour meter for apartment houses. Ger. patent application M 141767 VIIIb/21c 44, dated Jan 14, 1941. In German. 3.00
Drawing.

7788-7793 PB L 83249 TROSSBACH, A. (Inventor). Method for the determination of current density, especially in electrolytic baths. Ger. patent application T 50384, dated May 10, 1938. In German. 2.00

7794-7797 PB L 83249 JUNG-ZAEPER, C. (Inventor). Method for the operation of a switch by impulses of predetermined length. Ger. patent application, dated Jul 21, 1944. In German. 2.00
Diagram.

7798-7805 PB L 83249 JUNG-ZAEPER, C. (Inventor). Arrangement for frequency measurement of long pulses of ultrashort waves. Ger. patent application, dated Jul 20, 1944. In German. 2.00
Diagram.

7806-7808 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Medium frequency switching equipment. Ger. patent application S 158586 VIIIb/21c 35, dated Jan 17, 1944. In German. 2.00

7809-7810 PB L 83249 Choke coil. Ger. patent application S 158586 VIIIb/21c 35, dated Dec 16, 1944. In German. 2.00
Description for German patent 25750/44.

7811-7823 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Dielectric wave guide for ultrahigh frequencies. Ger. patent application S 160439 VIIIb/21, dated Jul 22, 1944. In German. 3.00

7824-7830 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Flexible tube, especially dielectric wave guide for the transmission of ultrahigh frequencies. Ger. patent application S 160438 VIIIb/21c, dated Jul 22, 1944. In German. 2.00

7831-7839 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Telegraph cable. Ger. patent application S 161163 VIIIb/21c, dated Sep 26, 1944. Inventor: Dennel. In German. 2.00
Drawings.

7840-7847 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Automatic switch. Ger. patent application S 158149 VIIIb/21c, dated Dec 8, 1943. In German. 2.00
Drawings.

7848-7850 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for impregnation of electric devices with insulating materials, especially high melting point materials. Ger. patent application S 158151 VIIIb/21c, dated Dec 8, 1943. In German. 2.00

7851-7854 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Cut-off switch for high-voltage switching equipment. Ger. patent application S 155448 VIIIb/21c, dated May 5, 1943. In German. 2.00
Drawings.

7855-7858 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Indoor high-voltage switching equipment with busbars and cut-off switches. Ger. patent application S 155450 VIIIb/21c, dated May 6, 1943. In German. 2.00
Drawing.

7859-7865 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Power plant with several synchronous motors. Ger. patent applicaton S 154840 VIIIb/21c, dated Mar 27, 1943. In German. 2.00
Diagrams.

7866-7870 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Color identification for cable strands with vinyl chloride plastic insulation. Ger. patent application S 159916 VIIIb/21c, dated Aug 14, 1943. In German. 2.00
Supplement to S 135316 VIIIb/21c.

7871-7875 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Mercury switch. Ger. patent application S 139655 VIIIb/21c, dated Dec 27, 1939. In German. 2.00
Drawing.

7876-7880 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Control switches for electric switching installations. Ger. patent application S 138734 VIIIb/21c 39, dated Nov 30, 1942. In German. 2.00
Drawing.

7881-7887 PB L 83249 PATIN, A. (Inventor). Remote transmission of rotary motion. Ger. patent application P 85726 VIIIb/21c 46, dated Feb 25, 1943. In German. 2.00

7888-7894 PB L 83249 PATIN, A. (Inventor). Remote transmission of rotary motion. Ger. patent application P 85727 VIIIb/21c 46, dated Feb 25, 1943. In German. 2.00
Drawings.

7895-7910 PB L 83249 PORZELLANFABRIK KAHLA, KAHLA-THÜRINGEN. Production method for wound wire or metal band resistors and induction coils with ceramic supports. Ger. patent application P 80332 VIIIb/21c, dated Feb 5, 1940. In German. 3.00
Drawings.

7911-7917 PB L 83249 VEREINIGTE SPIELWARENFABRIKEN ANDREAS FÜRTNER & J. HAFFNER'S NACHFOLGER, NÜRNBERG. Mechanical wire stripper. Ger. patent application, dated May 11, 1942. In German. 2.00

7918-7922 PB L 83249 VEREINIGTE DEUTSCHE METALLWERKE A.G., MANNHEIM. Arrangement for disconnecting main lines. Ger. patent application V 38731 VIIIb/21c, dated Apr 28, 1942. In German. 2.00

7923-7924 PB L 83249 Cable sheath. Ger. patent application H 158892, dated Mar 3, 1939. In German. 2.00

7925-7944 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Portable switching installation. Ger. patent application S 156551 VIIIb/21c, dated Jul 16, 1943. In German. 3.00
Drawings.

7945-7948 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Centrifugal switch. Ger. patent application S 157815 VIIIb/21c 40/03, dated Nov 1, 1943. In German. 2.00
Drawing.

7949-7953 PB L 83249 SIEMENS-LURGI-COTTRELL ELEKTROFILTER G.M.B.H., BERLIN. High-voltage lead-in insulator. Ger. patent application S 131585, dated Nov 14, 1940. In German. 2.00
Drawing.

7954-7962 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Power line. Ger. patent application S 131540 VIIIb/21c 14, dated Apr 2, 1938. In German. 2.00
Drawings.

7963-7969 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Water-proof pipe, especially as cable sheath. Ger. patent application S 131481, dated Mar 28, 1938. In German. 2.00
Drawing.

7970-7975 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Pin insulator for high-voltage lines or devices. Ger. patent application S 131452 VIIIb/21c 14/11, dated Jun 7, 1941. In German. 2.00
Drawing.

7976-7985 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Power switch. Ger. patent application S 131432 VIIIb/21c 56, dated Mar 2, 1942. In German. 2.00
Supplement to S 128097.

7986-7995 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Plug connection for high-voltage cables or lines. Ger. patent application S 145897 VIIIb/21c, dated Jun 26, 1941. In German. 2.00
Drawing.

7996-8002 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Loading coil sleeve for telegraph cables. Ger. patent application S 159015 VIIIb/21c, dated Mar 14, 1944. In German. 2.00
Drawing.

8003-8007 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Disconnect switch. Ger. patent application S 159011 VIIIb/21c 28/05, dated Mar 14, 1944. In German. 2.00

8008-8015 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Connection for electric conductors. Ger. patent application S 155767 /21c, dated May 26, 1943. In German. 2.00

8016-8020 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Cable line with loading coils. Ger. patent application S 159263 VIIIb/21c, dated Apr 5, 1944. In German. 2.00
Supplement to Ger. patent 723515.

8021-8035 PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Continuously loaded cable for carrier telegraphy. Ger. patent application S 159265 VIIIb/21c, dated Apr 6, 1944. In German. 3.00

8036-8038 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. A-c or d-c motor control. Ger. patent application, dated Jan 21, 1944. In German. 2.00

8039-8054 PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Variable resistor. Ger. patent application S 160997 VIIIb/21c, dated Sep 11, 1944. In German. 2.00
Drawings.

8055-8059
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for producing switch connections. Ger. patent application S 158665 VIIIb/21c, dated Jan 28, 1944. In German. 2.00

8060-8061
PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Method for preservation of insulating oils in electric devices. Ger. patent application, dated Jun 28, 1941. In German. 2.00

8062-8065
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Centrifugal switch for electric machines. Ger. patent application S 146019, dated Jul 4, 1941. In German. 2.00
Drawing.

8066-8069
PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Pyroelectric conductor. Ger. patent application S 146009 VIIIb/21c 54, dated Jul 4, 1941. In German. 2.00

8070-8072
PB L 83249 SIEMENS & HALSKE A.G., BERLIN. Method for producing plastic insulation with predetermined temperature coefficient of dielectric constant. Ger. patent application S 146006 VIIIb/21c 2, dated Jun 28, 1941. In German. 2.00

8073-8079
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Enclosed high-voltage switch panels. Ger. patent application S 145975 VIIIb/21c, dated Jul 2, 1941. In German. 2.00
Drawings.

8080-8088
PB L 83249 RIETZEL, O. (Inventor). Self-braking cardan joint. Ger. patent application R 103657, dated Oct 31, 1938. In German. 2.00
Drawings.

8089-8092
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for reducing contact wear. Ger. patent application S 159759 VIIIb/21c 59/29, dated May 19, 1944. In German. 2.00

8093-8096
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Centrifugal control device. Ger. patent application S 154870 VIIIb/21c 46/50, dated Mar 27, 1943. In German. 2.00

8097-8101
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Control device for d-c networks. Ger. patent application S 154872 VIIIb/21c 68, dated Mar 26, 1943. In German. 2.00
Diagram.

8102-8105
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Test circuit for vacuum tube control devices. Ger. patent application S 154873 VIIIb/21c 46, dated Mar 27, 1943. In German. 2.00
Diagram.

8106-8109
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for the protection of d-c high-voltage installations against voltage surges. Ger. patent application S 154874 VIIIb/21c 72, dated Mar 29, 1943. In German. 2.00
Diagram.

8110-8117
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Thermal cutout, control or signaling device. Ger. patent application S 155770 /21c, dated May 26, 1943. In German. 2.00
Drawings.
Supplement to S 143457 VIIId/21c.

8118-8122 SIEMENS-SCHUCKERTWERKE A.G., BERLIN.
PB L 83249 High-voltage installation, especially with portable units. Ger. patent application S 154790 VIIIb/21c, dated Mar 25, 1943. In German. 2.00
Drawings.

8123-8136
PB L 83249 Safety arrangement for double squirrel cage induction motors. Ger. patent application R 103566 VIIIb/21c, dated Oct 21, 1938. In German. 3.00
Diagrams.

8137-8145
PB L 83249 SIEMENS APPARATE UND MASCHINENBAU G.M.B.H., BERLIN. Arrangement for testing time delay of automatic switches. Ger. patent application S 156568 VIIId/21c, dated Jul 16, 1943. In German. 2.00
Diagrams.

8146-8149
PB L 83249 SACHSENWERK LICHT UND KRAFT A.G., NIEDERSEDLITZ-DRESDEN. High-voltage switching installation with single and multiple busbar systems. Ger. patent application S 154941 VIIIb/21c, dated Apr 3, 1943. In German. 2.00
Drawing.
Supplement to S 152436.

8150-8154
PB L 83249 SACHSENWERKE LICHT UND KRAFT A.G., NIEDERSEDLITZ-DRESDEN. Oil circuit breaker. Ger. patent application S 157743 VIIIb/21c, dated Oct 25, 1943. In German. 2.00
Drawing.

8155-8158
PB L 83249 SACHSENWERKE LICHT UND KRAFT A.G., NIEDERSEDLITZ-DRESDEN. High-voltage circuit breaker. Ger. patent application S 157753 VIIIb/21c, dated Oct 25, 1943. In German. 2.00

8159-8161
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Asynchronous speed control for asynchro motors, especially for cranes. Ger. patent application S 157803 VIIIb/21c 59/56, dated Nov 2, 1943. In German. 2.00

8162-8178
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Air or gas pressure circuit breaker. Ger. patent application, dated Jul 16, 1943. In German. 3.00
Drawings.

8179-8181
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Indoor high-voltage switching installation. Ger. patent application S 155620 VIIIb/21c, dated May 17, 1943. In German. 2.00
Drawing.

8182-8186
PB L 83249 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Single-strand telegraph cable. Ger. patent application, dated Apr 3, 1943. In German. 2.00
Diagrams.

8187-8192
PB L 83249 SIEBERT, J. (Inventor). Cable terminal and power supply connection. Ger. patent application S 155960 VIIIb/21c, dated May 5, 1943. In German. 2.00
Drawing.

PB L 83243. REICHSPATENTAMT, BERLIN. German patent applications class 21c. Power transmission and generating equipment, switches, circuit breakers etc. (FIAT Microfilm Reel B 109, Frames 3924-4821) 1933-1945. 898 f. Price: Microfilm-$7.00 - Enlargement Print-$91.00
This FIAT microfilm reel consists of 157 German patent applications for electric power generating and transmission equipment, switches, circuit breakers, control

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Frames	Title	Price
3924-3930 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Contact arrangement for circuit breakers. Ger. patent application S 116392 VIIIb/21c, dated Jun 23, 1937. In German. Drawing.	$2.00
3931-3938 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing telecommunication cables with non-impregnated paper insulation and a water-proof sheath. Ger. patent application S 116263 VIIId/21c, dated Apr 8, 1941. In German.	2.00
3939-3945 PB L 83243	NÜRNBERGER SCHRAUBENFABRIK UND ELEKTROWERK, NÜRNBERG. Control for gyroscopic instruments. Ger. patent application N 45989 VIIIb/21c, dated Sep 3, 1942. In German.	2.00
3946-3949 PB L 83243	SIMONS, C. (Inventor). Fiber crane containers and method for weaving such containers. Ger. patent application S 143380 VIIIb/21c, dated Dec 20, 1940. In German. Drawing.	2.00
3950-3956 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Binding agent for insulators especially for cementing mica particles. Ger. patent application S 143572, dated Jan 9, 1941. In German.	2.00
3957-3960 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Binding agent for insulators composed of layers, especially for cementing mica particles. Ger. patent application, dated Jan 9, 1941. In German.	2.00
3961-3967 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for carbon pile resistors. Ger. patent application S 146900 VIIIb/21c, dated Sep 9, 1941. In German. Drawings.	2.00
3968-3970 PB L 83243	SIEMENS-SCHUCKERWERKE A.G., BERLIN. Method for the production of high-grade insulation for electrical conductors, coils etc. Ger. patent application S 146884, dated Sep 8, 1941. In German. In German.	2.00
3971-3979 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing an inorganic fiber insulation with inorganic fillers between the fibers. Ger. patent application S 146540, dated Aug 1, 1941. In German. Drawing.	2.00
3980-3991 PB L 83243	SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Arrangement for a follow-up control. Ger. patent application S 143354 VIIIb/21c, dated Mar 31, 1942. In German. Diagrams.	3.00
3992-3994 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for preventing electrolytic corrosion on underground aluminum or aluminum alloy pipes and cables. Ger. patent application S 143345, dated Dec 16, 1940. In German.	2.00
3995-4000 PB L 83243	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for remote transmission of rotary motion. Ger. patent application S 143349 VIIIb/21c, dated Dec 17, 1940. In German. Diagram.	2.00
4001-4003 PB L 83243	Input circuit for instrument transformers. Ger. patent application Sch 125358 VIIIb/21c, dated Jun 25, 1942. In German. Supplement to Sch 120151 VIIIb/21c 46/50.	2.00
4004-4010 PB L 83243	SCHMECK, P. (Inventor). Driving mechanism with controllable rotation speed. Ger. patent application Sch 125374, dated Jul 29, 1942. In German. Drawing.	2.00
4011-4013 PB L 83243	STEATIT-MAGNESIA A.G., BERLIN. Contact construction for glazed wire resistors. Ger. patent application dated Jan 26, 1945. In German. Supplement.	2.00
4014-4018 PB L 83243	STOTZ-KONTKT G.M.B.H., MANNHEIM. Circuit for starting d-c motors. Ger. patent application St 63598 VIIId/21c 58, dated Nov 9, 1943. In German.	2.00
4019-4022 PB L 83243	STROBEL, G. (Inventor). Time switch. Ger. patent application St 63599, dated Nov 9, 1943. In German. Drawing.	2.00
4023-4028 PB L 83243	LICERITIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Wire strippers with locking arrangement. Ger. patent application L 114764 VIIIb/21c, dated Jun 10, 1944. In German. Drawings.	2.00
4029-4035 PB L 83243	Electric circuit breaker. Ger. patent application L 115053 VIIIb/21c, dated Jul 13, 1944. In German. Drawings.	2.00
4036-4037 PB L 83243	High-voltage switching arrangement. Ger. patent application L 114553 VIIIb/21c 35, dated Jan 20, 1945. In German. Drawing. Supplement to L 96900/21c 35.	2.00
4038-4041 PB L 83243	STÖGER, M. Electric fuse. Ger. patent application St 63427, dated Sep 2, 1943. In German.	2.00
4042-4048 PB L 83243	STOTZ-APPARATEBAU G.M.B.H., EBERBACH-BAD NECKARTHAL. Knife blade switch. Ger. patent application St 63577 VIIIb/21c 27/02, dated Oct 30, 1943. In German.	2.00
4049-4058 PB L 83243	STOTZ-APPARATEBAU G.M.B.H., EBERBACH-BAD NECKARTHAL. Knife blade for multipolar switches. Ger. patent application St 63562 VIIIb/21c 27/02, dated Oct 28, 1943. In German.	2.00
4059-4063 PB L 83243	STOTZ-KONTAKT G.M.B.H., MANNHEIM. Bimetallic release for automatic switching equipment. Ger. patent application St 63578 VIIIb/21c, dated Oct 30, 1943. In German. Supplement to St 61670 VIIIb/21c.	2.00
4064-4067 PB L 83243	STANDARD ELKTRIZITÄTS-GESELLSCHAFT A.G., BERLIN. Lead-in for electrical devices. Ger. patent application St 63586 VIIIb/21c 24/02, dated Nov 3, 1943. In German.	2.00
4068-4072 PB L 83243	WESTFÄLISCHE METALL-INDUSTRIE A.G., LIPPSTADT. Switch for electric installations, especially in vehicles. Ger. patent application W 110841	

VIIIb/21c, dated Apr 17, 1942. In German. 2.00
Drawings.

4073-4076 PB L 83243 WALTHER, O. (Inventor). Plug for wall sockets. Ger. patent application W 111277, dated Jun 6, 1942. In German. 2.00
Drawings.

4077-4080 PB L 83243 WALTHER, O. (Inventor). Branch terminal for electric cables. Ger. patent application W 111272, dated Jul 4, 1942. In German. 2.00
Drawings.

4081-4088 PB L 83243 WITTE (GEBRÜDER), LEIPZIG. Arrangement for the production of eyelet-type terminals on cable strands. Ger. patent application W 111242, dated Jul 1, 1942. In German. 2.00
Drawing.
Supplement to W 108264.

4089-4093 PB L 83243 WAGNER, K. (Inventor). Safety system for high-voltage net works. Ger. patent application W 111225 VIIIb/21c 68, dated Jun 27, 1942. In German. 2.00

4094-4097 PB L 83243 Photoelectric follow-up control. Ger. patent application W 111390 VIIIb/21c 46, dated Jul 27, 1942. In German. 2.00

4098-4101 PB L 83243 Electric time relay. Ger. patent application W 111391 VIIIb/21c, dated Jul 27, 1942. In German. 2.00
Diagrams.

4102-4106 PB L 83243 WICKMANN-WERKE A.G., WITTEN-ANNEN. Method of fastening metals in ceramics without the use of cement. Ger. patent application W 111399 VIIIb/21c 70, dated Jul 28, 1942. In German. 2.00
Drawings.

4107-4113 PB L 83243 WACKER (ROBERT) K.G., KLOTSCHE-DRESDEN. Current generating device. Ger. patent application W 111201/21d, dated Jun 23, 1942. In German. 2.00
Drawings.

4114-4117 PB L 83243 WEBER, H. (Inventor). Underground cables and cable fittings. Ger. patent application W 111422, dated Aug 3, 1942. In German. 2.00
Drawings.

4118-4121 PB L 83243 VEDDER (GEBRÜDER) K.G., SCHALKSMÜHLE-WESTFALEN. Flush-mounted socket with attached instrument support. Ger. patent application V 35058, dated Jun 20, 1938. In German. 2.00
Drawings.
Supplement to V 34905 VIIIb/21c.

4122-4126 PB L 83243 VOGEL (C.J.) DRAHT UND KABELWERKE A.G., (no address). Water-proof sheath for electric cables. Ger. patent application V 35045, dated Jul 7, 1938. In German. 2.00
Drawings.

4127-4136 PB L 83243 Automatic starter for electric motors. Ger. patent application S 150278, dated May 6, 1942. In German. 2.00

4137-4145 PB L 83243 FRIESKE & HÖPFNER, POTSDAM-BABELSBERG. Coupling for multipole connections. Ger. patent application F 90240, dated Jul 10, 1941. In German. 2.00
Drawings.

4146-4151 PB L 83243 DEUTSCHE KABELWERKE A.G., BERLIN. Method for testing cable sheaths of plastic or metallic bands. Ger. patent application D 91959 VIIIb/21c 3/12, dated Nov 2, 1943. In German. 2.00

4152-4163 PB L 83243 DEUTSCHE VERSUCHSANSTALT FÜR LUFTFAHRT E.V., BERLIN. Moving coil device independent of voltage. Ger. patent application D 85652 VIIId/21e, dated Feb 1, 1945. In German. 3.00
Drawings.

4164-4170 PB L 83243 DUROPLATTENWERK A.G., BERLIN. Electric switch. Ger. patent application D 89089 VIIIb/21c, dated Mar 31, 1945. In German. 2.00
Drawings.

4171-4175 PB L 83243 DEUTSCHE BABCOCK & WILCOX DAMPFKESSEL-WERKE A.G., OBERHAUSEN-RHEIN. Arrangement for synchronous operation of several individual shafts with individual drives. Ger. patent application D 89104 VIIIb/21c 46, dated Oct 17, 1942. In German. 2.00
Drawing.

4176-4182 PB L 83243 DEUTSCHE TELEPHONWERKE UND KABELINDUSTRIE A.G., BERLIN. Method and equipment for insulating electric conductors. Ger. patent application D 89135 VIIIb/21c 7, dated Nov 3, 1942. In German. 2.00
Drawing.

4183-4193 PB L 83243 FORSCHUNGSGESELLSCHAFT FÜR ZERSPANUNGS-TECHNIK M.B.H., AUGSBURG. Electric control for continuous operations, such as lathe operations. Ger. patent application F 94432/21c, dated Oct 6, 1943. In German. 3.00

4194-4196 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Electrical apparatus, especially transformer. Ger. patent application A 80807 VIIIb/21d 2/49, dated Jul 1, 1937. In German. 3.00

4197-4199 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Method for improving dielectric properties of varnishes, especially oil-base varnish. Ger. patent application A 87163, dated Jun 15, 1938. In German. 2.00

4200-4209 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Automatic switch, especially for cranes. Ger. patent application A 80332 VIIIb/21c 41/01, dated Aug 24, 1936. In German. 2.00
Drawing.

4210-4213 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Safety arrangement for electric motors with high starting voltages. Ger. patent application A 80409 VIIIb/21c 68/01, dated Mar 20, 1939. In German. 2.00
Drawing.
Supplement to A 77768 VIIIb/21c.

4214-4217 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Protective circuit for component parts of electric installations. Ger. patent application A 80415 VIIIb/2c 68/50, dated Dec 6, 1938. In German. 2.00
Diagram.
Supplement to A 79432 VIIIb/21c.

4218-4249 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Remote control and remote signaling arrangement. Ger. patent application A 80463 VIIIb/21c, gr. 47, dated Sep 17, 1940. In German. 5.00
Diagrams.

4250-4254 PB L 83243 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Uncemented lead-ins for housings of devices protected

against firedamp. Ger. patent application A 85219 VIIIb/21c 10/05, dated Feb 15, 1939. In German. 2.00
Drawing.

4255-4257 PB L 83243 BUSCH-JAEGER-LÜDENSCHEIDER METALLWERKE A.G., LÜDENSCHEID. Tubular contact pin. Ger. patent application, dated May 6, 1944. In German. 2.00

4258-4261 PB L 83243 BAYERISCHE MOTORENWERKE A.G., MUNICH. Junction boxes arranged on columnar supports. Ger. patent application B 206045 VIIIb/21c, dated May 2, 1944. In German. 2.00
Drawing.

4262-4265 PB L 83243 BLAUPUNKT-WERKE G.M.B.H., BERLIN. Junction arrangement composed of uniform parts. Ger. patent application B 206051 VIIIb/21c 22, dated May 3, 1944. In German. 2.00
Drawing

4266-4272 PB L 83243 HOFFMANN & MUSLOW, HAMBURG. Junction box for electrical conductors, especially aluminum conductors. Ger. patent application H 162106, dated Apr 17, 1940. In German. 2.00
Drawings.

4273-4276 PB L 83243 Automatic push-button switch. Ger. patent application H 161549 VIIIb/21c 68/01, dated Sep 1, 1943. In German. 2.00
Drawings.

4277-4289 PB L 83243 HELM, W. (Inventor). Voltage and current regulation. Ger. patent application H 161240 VIIIb/21c 39, dated Dec 27, 1938. In German. 3.00
Drawings.

4290-4304 PB L 83243 Remote control and remote signalling arrangement. Ger. patent application A 67983 VIIIb/21c gr. 47, dated Oct 14, 1937. In German. 3.00
Diagrams.

4305-4307 PB L 83243 BUSCH-FAEGER-LÜDENSCHEIDER METALLWERKE A.G., LÜDENSCHEID. Box or sleeve with internal threads for contact junctions. Ger. patent application B 203370 VIIIb/21c, dated Jul 20, 1943. In German. 2.00
Drawing.

4308-4310 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Connections for double-wire coils. Ger. patent application S 158236 VIIIb/21c 23/10, dated Dec 7, 1943. In German. 2.00

4311-4313 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Junction box. Ger. patent application S 158243 VIIIb/21c 1/15, dated Dec 14, 1943. In German. 2.00

4314-4318 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric conductor. Ger. patent application S 158244 VIIIb/21c 3/27, dated Dec 14, 1943. In German. 2.00

4319-4323 PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Electric plug and socket. Ger. patent application S 155362, dated Apr 27, 1943. In German. 2.00
Drawing.

4324-4340 PB L 83243 RAABE, W. and others (Inventors). Method and arrangement for open welding of cable terminals. Ger. patent application R 114498, dated Oct 24, 1942. In German. 3.00
Drawings.

4341-4345 PB L 83243 ROSENTHAL ISOLATOREN G.M.B.H., SELB. Electric insulator. Ger. patent application R 108778, dated Nov 19, 1940. In German. 2.00
Drawing.

4346-4350 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for amplification of excitation voltage. Ger. patent application S 138877, dated May 10, 1939. In German. 2.00
Diagram.
Supplement to S 137880 VIIId/21c.

4351-4353 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement of busbars and lines in power stations. Ger. patent application S 157353 VIIIb/21c, dated Sep 24, 1943. In German. 2.00
Drawing.

4354-4357 PB L 83243 PORZELLANFABRIK KAHLA, KAHLA-THÜRINGEN. Arrangement of metallic parts of power transmission insulators on steel towers. Ger. patent application P 78992 /21c 14/05, dated Apr 6, 1939. In German. 2.00
Drawings.
Supplement to P 77820 VIIIb/21c 14/03.

4358-4361 PB L 83243 PURRMANN (MAX), DÜSSELDORF. Moving coil relay with a switching arrangement. Ger. patent application P 83942 VIIIb/21c 46, dated Mar 21, 1942. In German. 2.00
Drawing.

4362-4366 PB L 83243 PURRMANN (MAX), DÜSSELDORF. Encased disconnect-switches for branch overhead lines. Ger. patent application P 83975 VIIIb/21c 28, dated Mar 25, 1942. In German. 2.00
Drawing.
Supplement to P 83212 VIIIb/21c gr. 28/03.

4367-4371 PB L 83243 PURRMANN (MAX), DÜSSELDORF. Disconnect switch. Ger. patent application P 84114 VIIIb/21c 28, dated Apr 23, 1942. In German. 2.00
Drawing.
Supplement to P 75812 VIIIb/21c.

4372-4378 PB L 83243 PORZELLANFABRIK KAHLA, KAHLA-THÜRINGEN. Arc safety for high-voltage insulators. Ger. patent application P 84150 VIIIb/21c 15, dated May 1, 1942. In German. 2.00
Drawings.

4379-4382 PB L 83243 POMPER, A. (Inventor). Insulation and varnish for coils with woven insulation. Ger. patent application P 84179, dated Apr 29, 1942. In German. 2.00

4383-4388 PB L 83243 PRAUTZSCH, A. and others (Inventors). Tamperproof socket with safety plug. Ger. patent application, dated Jun 1, 1942. In German. 2.00
Drawings.

4389-4397 PB L 83243 PLATH, C. (Inventor). Arrangement for inductive control of rotation speed and direction of electric motors. Ger. patent application P 84324 VIIIb/21c, dated Jun 2, 1942. In German. 2.00
Diagram.

4398-4400 PB L 83243 PREH ELEKTROFEINMECHANISCHE WERKE, BAD NEUSTADT-SAALE. Method for producing layers of high ohmic resistance, especially for variable resistors. Ger. patent application P 85108 VIIIb/21c 54, dated Nov 5, 1942. In German. 2.00

4401-4412 PURRMANN (MAX), DÜSSELDORF. Dis-

PB L 83243 connect switch for branch overhead lines. Ger. patent application P 85177 VIIIb/21c 28, dated Nov 18, 1942. In German. 3.00
Drawings.

4413-4418
PB L 83243 SIEMENS APPARATE UND MASCHINEN G.M.B.H., BERLIN. Variable resistor. Ger. patent application S 155352 VIIIb/21c 46/05, dated May 3, 1943. In German. 2.00
Drawings.

4419-4423
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for increasing the sensitivity of ground leak relays. Ger. patent application S 155356 VIIIb/21c 68, dated Apr 22, 1943. In German. 2.00
Diagram.

4424-4427
PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Long distance telegraph cable. Ger. patent application S 156499, dated Jul 19, 1943. In German. 2.00
Drawing.

4428-4434
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Drive for moving switch parts. Ger. patent application S 156242 VIIIb/21c, dated Jun 23, 1943. In German. 2.00
Drawing.
Supplement to S 151894 VIIIb/21c.

4435-4439
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Contact arrangement for circuit breakers, especially oil-filled circuit breakers. Ger. patent application S 156244 VIIIb/21c, dated Jun 24, 1943. In German. 2.00
Drawing.
Supplement to S 141758 VIIIb/21c.

4440-4444
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Connection for bare or insulated conductors. Ger. patent application S 156245, dated Jun 24, 1943. In German. 2.00
Drawings.

4445-4447
PB L 83243 RHEINISCHE DRAHT UND KABELWERKE G.M.B.H., COLOGUE. Hollow wire with a moisture and corrosion proof protective coating. Ger. patent application, dated Oct 7, 1935. In German. 2.00

4448-4451
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Stress-resistant mounting for electric lines and cables. Ger. patent application S 158801 VIIIb/21c, dated Feb 12, 1944. In German. 2.00

4452-4454
PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Sleeve for portable cables. Ger. patent application S 158770 VIIIb/21c 23/07, dated Feb 11, 1944. In German. 2.00

4455-4461
PB L 83243 VEREINIGTE DEUTSCHE METALLWERKE A.G., FRANKFURT AM MAIN. Arrangement for damping vibrations of high-voltage overhead lines. Ger. patent application V 37494 VIIIb/21c 6, dated Mar 4, 1941. In German. 2.00

4462-4466
PB L 83243 VEDDER (GEBRÜDER), SCHALKSMÜHLE-WESTFALEN. Wall-switch cover plates. Ger. patent application V 32551 VIIIb/21c, dated Feb 12, 1936. In German. 2.00
Drawings.

4467-4471
PB L 83243 VOIGT & HAEFFNER A.G., FRANKFURT AM MAIN. Circuit breaker with arc extinction by air current. Ger. patent application V 30356 VIIIb/21c 35, dated Aug 18, 1936. In German. 2.00
Drawing.
Supplement to V 30015 VIIIb/21c.

4472-4477
PB L 83243 VOIGT & HAEFFNER A.G., FRANKFURT AM MAIN. Circuit breaker with arc extinction by air current. Ger. patent application, dated Dec 28, 1934. In German. 2.00
Drawing.
Supplement to V 30015 VIIIb/21c 35.

4478-4484
PB L 83243 VOIGT & HAEFFNER A.G., FRANKFURT AM MAIN. Knife blade drive switch. Ger. patent application V 36469 VIIIb/21c 45, dated Feb 3, 1940. In German. 2.00
Drawings.
Supplement to S 35279 VIIIb/21c.

4485-4488
PB L 83243 VOGEL (C.J.) DRAHT UND KABELFABRIK A.G. Insulating material for electric conductors. Ger. patent application V 36207, dated Oct 4, 1939. In German. 2.00

4489-4492
PB L 83243 TELEFUNKEN GESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIE M.B.H., BERLIN. Method and arrangement for rotation speed measurement of d-c generators. Ger. patent application T 59649 VIIIb/21c, dated Oct 14, 1943. In German. 2.00

4493-4495
PB L 83243 TEUBERT, W. (Inventor). Current supply by radio waves. Ger. patent application T 59642 VIIIb/21d 3, dated Oct 13, 1943. In German. 2.00

4496-4502
PB L 83243 TELEFUNKEN GESELLSCHAFT FÜR DRAHTLOSE TELEGRAPHIE M.B.H., BERLIN. Arrangement for the prevention of wear on contacts of mechanical inverters. Ger. patent application T 59641/21d, dated Oct 8, 1943. In German. 2.00

4503-4509
PB L 83243 UHER & CO., GESELLSCHAFT FÜR APPARATEBAU, MUNICH. Device for arbitrary extension of the lifting range of electromagnets. Ger. patent application U 15528, dated Nov 14, 1941. In German. 2.00
Drawings.

4510-4514
PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Terminal arrangement for portable cables. Ger. patent application S 138346, dated Aug 19, 1939. In German. 2.00
Drawing.
Supplement to S 124621 VIIIb/21c 19/06.

4515-4524
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. High-voltage cable. Ger. patent application S 133757, dated Sep 5, 1938. In German. 2.00
Drawing.

4525-4529
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric cable with impregnated paper insulation. Ger. patent application S 135717 VIIIb/21c 3/01, dated Apr 25, 1941. In German. 2.00

4530-4532
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for producing heating cables. Ger. patent application S 135727 VIIIb/21c 7/01, dated Nov 26, 1941. In German. 2.00

4533-4537
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G, BERLIN. Switching installation for high-voltage power stations. Ger. patent application S 133747 VIIIb/21c, dated Mar 9, 1938. In German. 2.00
Diagram.

4538-4541
PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric cable with a soft sheath. Ger. patent application, dated Jun 22, 1944. Inventor: Schumann, K. In German. 2.00
Drawing.
Supplement to S 155291 VIIIb/21c.

4542-4547
PB L 83243
SIEMENS & HALSKE A.G., BERLIN. Terminal connections for electric conductors, especially overhead lines. Ger. patent application S 160033 VIIIb/21c, dated Jun 20, 1944. In German. 2.00

4548-4549
PB L 83243
SIEMENS & HALSKE A.G., BERLIN. H-type plug. Ger. patent application S 160032 VIIIb/21c, dated Jun 16, 1944. In German. 2.00

4550-4553
PB L 83243
SIEMENS & HALSKE A.G., BERLIN. Insulator and production methods. Ger. patent application S 160095, dated Jun 24, 1944. In German. 2.00

4554-4558
PB L 83243
SIEMENS & HALSKE A.G., BERLIN. Electric cable with a soft sheath. Ger. patent application S 156861 VIIIb/21c, dated Aug 7, 1943. In German. 2.00
Drawing.
Supplement to S 155291 VIIIb/21c.

4559-4574
PB L 83243
LIST, H. (Inventor). Wedge-type connection of cable strands on sheet metal. Ger. patent application L 115059 VIIIb/21c, dated Jul 15, 1944. In German. 3.00
Drawings.

4575-4578
PB L 83243
VOIGT & HAEFFNER A.G., FRANKFURT AM MAIN. Electromagnetic overload relay. Ger. patent application V 38926 VIIIb/21c 68, dated Jul 1, 1942. In German. 2.00
Drawings.

4579-4581
PB L 83243
WEINDENFELD, H. (Inventor). Universal plastic clamp for electric wires and cables. Ger. patent application W 114257 VIIIb/21c 17, dated Dec 11, 1943. In German. 2.00
Drawings.

4582-4587
PB L 83243
VOIGT & HAEFFNER A.G., FRANKFURT AM MAIN. Electromagnetic contactor. Ger. patent application V 38454 VIIIb/21c 45, dated Jan 26, 1942. In German. 2.00
Drawing.

4588-4595
PB L 83243
RUPPEL, S. (Inventor). Dead tank oil circuit breaker. Ger. patent application R 92818 VIIIb/21c 36, dated Mar 7, 1935. In German. 2.00
Drawing.
Supplement to R 38826 VIIIb/21c.

4596-4597
PB L 83243
ROTH, F. (Inventor). Housing for firedamp-proof switches. Ger. patent application R 104746 VIIIb/21c, dated Mar 11, 1939. In German. 2.00

4598-4607
PB L 83243
RUDOLF, W. (Inventor). Water-proof terminal case for telephone and telegraph installations. Ger. patent application R 104838, dated Mar 23, 1939. In German. 2.00
Drawing.

4608-4612
PB L 83243
RUPPEL, F. (Inventor). Electric circuit breaker. Ger. patent application R 91947 VIIIb/21c 35, dated Aug 21, 1940. In German. 2.00
Drawing.
Supplement to Pat 689992.

4613-4621
PB L 83243
RUPPEL, S. (Inventor). Oil circuit breaker with arc extinction by steam. Ger. patent application R 83712 VIIIb/21c 2, dated Apr 4, 1933. In German. 2.00
Drawings.
Supplement to R 1703.30/21c 2.

4622-4625
PB L 83243
RISTAU, B. (Inventor). Arrangement for the stabilization of a relay control current. Ger. patent application R 102375 VIIIb/21c 68/50, dated Apr 18, 1941. In German. 2.00
Diagram.

4626-4630
PB L 83243
JUNG-ZAEPER, K. (Inventor). Electric control for grid winding machines. Ger. patent application, dated Jun 28, 1944. In German. 2.00
Drawing.

4631-4635
PB L 83243
Arrangement for regulation of the ratio of output of two generators and the like. Ger. patent application L 114182 VIIIb/21c 65/05, dated Mar 28, 1944. In German. 2.00

4636-4638
PB L 83243
Terminal clamp with one fixed and one movable jaw, especially for resistance measuring bridge circuits. Ger. patent application L 114355 VIIIb/21c, dated Apr 25, 1944. In German. 2.00
Diagram.

4639-4644
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Electric plug with remote control locking device. Ger. patent application L 114354 VIIIb/21c, dated Apr 24, 1944. In German. 2.00

4645-4649
PB L 83243
Arrangement for d-c motors. Ger. patent application L 114350 VIIIb/21c 59/10, dated Apr 18, 1944. In German. 2.00

4650
PB L 83243
Ground connection for metallized insulators. Ger. patent application L 114032 VIIIb/21c, dated Mar 15, 1944. In German. 2.00

4651-4654
PB L 83243
Centrifugal contact regulator. Ger. patent application L 114000 VIIIb/21c 59/27, dated Feb 28, 1944. In German. 2.00
Drawings.

4655-4659
PB L 83243
Speed control for electric motors. Ger. patent application L 114001 VIIIb/21c 59/29, dated Mar 9, 1944. In German. 2.00
Drawings.

4660-4665
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Contact clamp for electric conductors. Ger. patent application L 114153 VIIIb/21c, dated Mar 27, 1944. In German. 2.00
Drawing.

4666-4671
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Arrangement for the prevention of a poor contact. Ger. patent application L 114151 VIIIb/21c, dated Mar 27, 1944. In German. 2.00
Drawings.

4672-4674
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Method for sealing contact points, especially in cables, with plastic sheaths. Ger. patent application L 114150 VIIIb/21c, dated Mar 27, 1944. In German. 2.00

4675-4679
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Clamps for wire terminals. Ger. patent application L 114148 VIIIb/21c, dated Mar 29, 1944. In German. 2.00
Drawing.
Supplement to L 106260 VIIIb/21c 27/02.

4680-4683
PB L 83243
LICEUTIA PATENT-VERWALTUNGS G.M.B.H., BERLIN. Resistors consisting of parallel-connected elements made of metal, especially silicon iron. Ger. patent application L 112163 VIIIb/21c, dated Feb 9, 1943. In German. 2.00
Drawing.

4684-4689 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Synchronous motor for control devices on transformers, choke coils or the like. Ger. patent application S 152973 VIIIb/21c, dated Nov 14, 1942. In German. 2.00
Drawings.

4690-4693 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for voltage stabilization, especially of d-c generators. Ger. patent application S 150077, dated Apr 25, 1942. In German. 2.00
Diagrams.

4694-4697 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Circuit for remote controlled switches. Ger. patent application S 150069 VIIIb/21c 45, dated Apr 23, 1942. In German. 2.00
Diagram.

4698-4702 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Elektromagnet. Ger. patent application S 147827 VIIIb/21c 68, dated Nov 25, 1941. In German. 2.00
Diagrams.

4703-4707 PB L 83243 Time relay with an electric clock and time delay control. Ger. patent application, n.d. In German. 2.00
Drawings.

4708-4709 PB L 83243 Arrangement for the protection of insulators of electric lines and cables during soldering of contacts. Ger. patent application L 114430 VIIIb/21c, dated Apr 26, 1944. In German. 2.00
Drawing.

4710-4713 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement on zinc conductors. Ger. patent application S 153033, dated Nov 23, 1942. In German. 2.00
Drawing.

4714-4719 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Polyphase power transformer or choke coil. Ger. patent application S 152970 VIIIb/21c 72, dated Nov 19, 1942. In German. 2.00
Diagrams.

4720-4730 PB L 83243 SOCIETÀ ANNONIMA ELETTROMECCANICA LOMBARDIA. MILAN, ITALY. Automatic speed control for d-c generators. Ger. patent application S 149221 VIIId/21c, dated Mar 3, 1942. In German. 3.00
Drawings.

4731-4732 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for producing longitudinal folds on insulating bands for cables. Ger. patent application S 149195 VIIIb/21c, dated Mar 2, 1942. In German. 2.00
Supplement to S 148171 VIIIb/21c.

4733-4740 PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Overhead transmission system with several parallel lines for carrier telegraphy or telephony. Ger. patent application S 149189, dated Mar 2, 1942. In German. 2.00
Diagrams.

4741-4744 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for the production of heavy cable insulation consisting of non-overlapping bands. Ger. patent application S 149193, dated Mar 2, 1942. In German. 2.00
Drawing.

4745-4748 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Oil switch. Ger. patent application S 147648 VIIIb/21c 36, dated Nov 12, 1941. In German. 2.00
Drawing.

4749-4752 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Indoor switching installation with a double busbar system. Ger. patent application S 149741 VIIIb/21c, dated Mar 31, 1942. In German. 2.00
Drawing.

4753-4756 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Switching installation with power switches and busbars. Ger. patent application S 150592 VIIIb/21c 40, dated May 28, 1942. In German. 2.00
Drawings.
Supplement to S 146750 VIIIb/21c.

4757-4763 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Electric synchro motors for machine tools. Ger. patent application S 148263, dated Dec 29, 1941. In German. 2.00
Diagrams.

4764-4769 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Rectifier for automatic charging of batteries. Ger. patent application S 147497 VIIIb/21c 50, dated Oct 30, 1941. In German. 2.00
Diagram.

4770-4775 PB L 83243 SACHSENWERK LICHT UND KRAFT A.G., DRESDEN. Oil-poor high-voltage circuit breaker. Ger. patent application S 147570 VIIIb/21c 36, dated Nov 1, 1941. In German. 2.00
Drawings.

4776-4783 PB L 83243 SIEMENS & HALSKE A.G., BERLIN. Method for providing distending magnetophone bands with insulating coats. Ger. patent application S 148533, dated Jan 20, 1942. In German. 2.00
Drawings.

4784-4787 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Cables with metallic sheaths, especially lead sheaths. Ger. patent application S 147535, dated Nov 3, 1941. In German. 2.00
Drawing.

4788-4791 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Method for glazing fiberglas insulated wires, particulary electric conductors. Ger. patent application S 147545, dated Nov 1, 1941. In German. 2.00

4792-4794 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement on electric motors with speed control. Ger. patent application S 151264, dated Jul 15, 1942. In German. 2.00
Drawing.

4795-4797 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for instantaneous de-energizing of high-voltage switching equipment. Ger. patent application S 148996 VIIIb/21c 42, dated Feb 18, 1942. In German. 2.00

4798-4800 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Switching equipment, particularly for underwater power plants. Ger. patent application S 148993 VIIIb/21c, dated Feb 16, 1942. In German. 2.00

4801-4809 PB L 83243 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Disconnect switch for crossing conductors. Ger. patent application S 155721 VIIIb/21c 28/03, dated Mar 14, 1945. In German. 2.00
Drawings.

4810-4817 SIEMENS-SCHUCKERTWERKE A.G., BERLIN.

PB L 83243 Arrangement for tension relief in overhead lines. Ger. patent application S 148132, dated Dec 16, 1941. In German. 2.00
Drawings.

4818-4821 SIEMENS-SCHUCKERTWERKE A.G., BERLIN.
PB L 83243 Wheel frame for high-voltage equipment, e.g. high-voltage circuit breakers. Ger. patent application S 148136, dated Dec 17, 1941. In German. 2.00
Drawing.
Supplement to 141734 VIIIb/21c.

INSTRUMENTS (PROFESSIONAL, SCIENTIFIC AND CONTROLLING)

PB L 83960. REICHSPATENTAMT, BERLIN. German patent applications for electric measuring devices. (FIAT Microfilm Reel J 82, Frames 2486-3232). 1927-1945. 747f. Price: Microfilm -$7.00 - Enlargement print -$76.00
This FIAT microfilm reel consists of 111 German patent applications for electric measuring devices and measuring technique as listed below. Individual items will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $7.00. Please include PB and frame numbers when ordering individual items from this microfilm reel. In German.

Frames	Title	Price
2486-2493 PB L 83960	RAJEWSKY, B. (Inventor) Measuring device for electric systems requiring extremely high insulation. German patent application R 104560, dated Feb 15, 1939. In German. Drawing.	$2.00
2494-2499 PB L 83960	SIEMENS & HALSKE A.G., BERLIN. Cathode-ray oscillograph for coarse and fine indication. German patent application S 155195, dated Apr 16, 1943. In German. Drawings.	2.00
2500-2503 PB L 83960	SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Permanent magnet arrangement for counting instruments. German patent application S 155276, dated Apr 22, 1943. In German. Drawing.	2.00
2504-2511 PB L 83960	MÜHLENHAUS, A. (Inventor) Frequency meter and a method for indicating small frequency ranges. German patent application M 152975, dated Jan 14, 1942. In German. Drawing.	2.00
2512-2523 PB L 83960	STANDARD ELEKTRIZITÄTS-GESELLSCHAFT A.G., BERLIN. Circuit arrangement for testing equipment in tele-communication stations. German patent application St. 64131 VIIId/21c, dated May 6, 1944. In German. Diagrams.	3.00
2524-2527 PB L 83960	JUNG-ZAEPER, C. (Inventors) Arrangement for quadripole measurement. German patent application L 114873 VIIId/21c, dated Jun 12, 1944. In German. Drawing.	2.00
2528-2535 PB L 83960	Electric device for measuring magnetic field strength. German patent application L 114383 VIIId/21c, dated Apr 21, 1944. In German. Drawing.	2.00
2536-2541 PB L 83960	BARZ (Inventor) Arrangement for voltage regulation, especially for voltage increase with increasing load, in a-c circuits. German patent application not known. n.d. In German. Drawing.	2.00
2542-2575 PB L 83960	FERNSCH G.M.B.H., BERLIN. Arrangement for measuring the momentary values of small a-c voltages. German patent application F 94878 VIIId/21c, dated Jan 31, 1944. In German. Diagrams.	5.00
2576-2583 PB L 83960	Method for observing several frequencies by means of a cathode-ray tube. German patent application H 159475, dated May 3, 1938. In German. Diagrams.	2.00
2584-2590 PB L 83960	HERTERICH, W. (Inventor) Electrical precision measuring device. German patent application dated May 3, 1939. In German. Diagram.	2.00
2591-2605 PB L 83960	HARTMAN & BRAUN A.G., FRANKFURT/MAIN. Multi-meter. German patent application dated Sep 21, 1939. In German. Diagrams.	3.00
2606-2612 PB L 83960	ALLGEMEINE ELEKTRIZITÄTS-GESELLSCHAFT M.B.H., BERLIN. Starting arrangement for switching operations in experimental electric stations. German patent application A 87661 VIIId/21c, dated Jan 13, 1937. In German. Supplement to patent application A 81 386 VIIId/21c. Diagrams.	2.00
2613-2616 PB L 83960	DEUTSCHE REVISIONS -UND TREUHAND-AKTIENGESELLSCHAFT, BERLIN. Method for comparing the phase angles of two a-c voltages by means of Lissajou diagrams. German patent application D 92486 VIIId/21c, dated Jan 25, 1944. In German.	2.00
2617-2621 PB L 83960	DEUTSCHE FERNKABELGESELLSCHAFT M.B.H., BERLIN. Method for avoiding errors producing currents in electric measurements. German patent application D 92258 VIIId/21c, dated Dec 7, 1943. In German.	2.00
2622-2625 PB L 83960	DEUTSCHE EDELSTAHLWERKE A.G., BERLIN. Brake magnet. German patent application D 92256 VIIId/21c, dated Dec 20, 1943. In German.	2.00
2626-2633 PB L 83960	DEUTSCHE VERSUCHSAUSTALT FÜR LUFTFABRT E.V., BERLIN. Quotient measuring device. German patent application D 91 709 VIIId/21c, dated Sep 27, 1943. In German. Drawing.	2.00
2634-2644 PB L 83960	ALLGEMEINE ELEKTRISITATS-GESELLSCHAFT M.B.H., BERLIN. Arrangement with two or more cathode-ray tubes. German patent application A 84406 VIIId/21c, dated Oct 5, 1937. In German.	3.00
2645-2652 PB L 83960	DYNAMIT A.G. TROISDORF, GERMANY. Magnet arrangement for moving coils with a long calibration scale. German patent application B 142915 VIIId/21c, dated Feb 9, 1936. Inventor: Baermann, M. In German. Drawing.	2.00
2653-2663 PB L 83960	ARADO FLUGZEUGWERKE G.M.B.H., POTTSDAM. Automatic testing device for aircraft dashboard instruments. German patent application A 98014 VIIId/21c, dated May 8, 1943. In German. Diagram.	3.00
2664-2671 PB L 83960	ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Insulation testing device for the protection of electric installations. German patent application A 74154 VIIId/21c, dated Jun 9, 1938. In German. Drawing.	2.00

2672-2695 PB L 83960 STANDARD ELEKTRIZITÄTS-GESELLSCHAFT A.G., BERLIN. Arrangement for the comparison and measurement of the phase angle of two electromotive forces. German patent application St. 62650 VIIId/21c, dated Jan 6, 1943. In German. Diagrams. 3.00

2696-2701 PB L 83960 MOCK, W. (Inventor) Measuring device for the comparison of capacitances, inductances or impedances. German patent application M 142851 VIIId/21c, dated Sep 23, 1938. In German. Diagram. 2.00

2702-2711 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Circuit arrangement for comparing the values of two alternating voltages. German patent application S 144321 VIIId/21c, dated Mar 3, 1941. In German. Diagrams. 2.00

2712-2720 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Electric testing arrangements. German patent application S 144352 VIIId/21c, dated Mar 7, 1941. In German. Drawings. 2.00

2721-2731 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Arrangement for the measurement of small direct currents by an a-c differential circuit. German patent application S 194351 VIII d/21c, dated Jun 29, 1942. In German. Diagrams. 3.00

2732-2738 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Method for selecting dry-disk rectifiers suitable for operation under specific conditions. German patent application S 158056 VIII d/21c, dated Nov 23, 1943. In German. 2.00

2739-2744 PB L 83960 POHLMANN, W. (Inventor) Arrangement for measuring phase angle differences between two a-c voltages or currents. German patent application P 84341 VIIId/21c, dated Jun 1, 1942. In German. Diagram. 2.00

2745-2750 PB L 83960 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Arrangement for the duplication of electric networks or circuits. German patent application S 145697 VIIId/21c, dated Jun 3, 1941. In German. Diagrams. 2.00

2751-2758 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Amplifier especially for oscillographic observation of very high-frequency short individual impulses. German patent application S 147108 VIIId/21c, dated Sep 26, 1941. In German. Diagram. 2.00

2759-2764 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Current transformer. German patent application S 145198 VIIId/21c, dated Feb 16, 1945. In German. Drawing. 2.00

2765-2769 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Arrangement for measuring a-c voltages or currents. German patent application S 146 698 VIIId/21c, dated Aug 23, 1941. In German. Diagram. 2.00

2770-2773 PB L 83960 OPITZ, G. (Inventor) Calibrator and divider for alternating currents of frequencies up to 109 cps (wave length 30cm.) German patent application R 116971 VIIId/21c, dated Aug 23, 1943. In German. Drawing. 2.00

2774-2776 PB L 83960 REUSSE, W. (Inventor) Arrangement for measuring ultrahigh-frequency voltages. German patent application R 117011 VIIId/21c, dated Aug 27, 1943. In German. 2.00

2777-2782 PB L 83960 REICHSWERKE A.G., FUR ERZBERGBAU UND EISENHÜTTEN "HERMANN GÖRING", BERLIN. High tension indicating arrangement for switching installations, especially for high-voltage circuit breakers. German patent application dated Jan 6, 1944. In German. 2.00

2783-2785 PB L 83960 REUSSE, W. (Inventor) Method for measuring ultrahigh-frequency voltages by means of a capacitor with parallel electrodes. German patent application R 116501 VIIId/21c, dated Jun 23, 1943. In German. 2.00

2786-2789 PB L 83960 HARTMANN & BRAUN A.G., FRANKFURT/MAIN. Rotary magnet. German patent application H 170335 VIIId/21c, dated Dec 17, 1942. In German. Supplement to application H 168157 VIIId/21c. Diagrams. 2.00

2790-2792 PB L 83960 Measuring instruments for switch boards. German patent application O 108728 VIIId/21c, dated Jan 21, 1944. In German. Drawing. 2.00

2793-2800 PB L 83950 GEMA GESELLSCHAFT M.B.H., BERLIN. Arrangement for phase angle measurement by means of a moving field phase shifter. German patent application G 117196 VIIId/21c, dated Mar 10, 1943. In German. Drawings. 2.00

2801-2804 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Saw-tooth oscillator circuit. German patent application A 85442 VIIId/21c, dated Dec 4, 1941. In German. Diagrams. 2.00

2805-2808 PB L 83960 GEMA GESELLSCHAFT M.B.H., BERLIN. Arrangement for measuring voltages of ultrahigh frequency. German patent application dated Jul 28, 1943. In German. 2.00

2809-2811 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Pole piece for moving coil instruments with permanent magnets made of metal sheets sprayed or otherwise coated with non-magnetic material. German patent application G 108183 VIIId/21c, dated Sep 15, 1943. In German. Supplement to patent application G 105 595. 3.00

2812-2821 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Rectifier. German patent application A 86907 VIIId/21c, dated Jun 27, 1939. In German. Diagrams. 2.00

2822-2831 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Pole piece for moving coils with permanent magnets of block, prismatic, or cylindrical form for, especially as supplement to patent (application G 104155 VIIId/21c). German patent application G 105304 VIIId/21c, dated May 1, 1942. In German. Drawings. 2.00

2832-2835 PB L 83960 ALLGEMEINE ELEKTRICITÄTS GESELLSCHAFT M.B.H., BERLIN. Pulse voltage testing arrangement. German patent application A 85317 VIIId/21c, dated Dec 24, 1937. In German. 2.00

2836-2839 PB L 83960 FOCKE-WULF FLUGZEUGBAU G.M.B.H., BREMEN. Arrangement for testing electric circuits. German patent application F 941 71 VIIId/21c, dated Jul 22, 1942. In German. Diagram. 2.00

2840-2844 PB L 83960 Beat-frequency oscillator. German patent application F 94025 VIIId/21c, dated Jun 25, 1943. In German. 2.00

2845-2849 PB L 83960 Arrangement for determining higher harmonics of an a-c voltage. German patent application G 97621 VIIId/21c, dated Apr 5, 1938. In German. 2.00
Supplement to patent application G 95 215. Diagrams.

2850-2852 PB L 83960 Moving coil instrument with non-homogenous magnetic field. German patent application F 95324 VIIId/21c, dated Jun 9, 1944. In German. 2.00

2853-2860 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Moving coil instrument with a U-shaped carrier for the coil, a magnet support with spiral springs and a holder for the pole piece. German patent application G 104303 VIIId/21c, dated Apr 5, 1943. In German. 2.00
Supplement to patent application G 101 692 VIIId/21c. Drawing.

2861-2871 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Housing for electric measuring instruments. German patent application G 106952 VIIId/21c, dated Feb 5, 1943. In German. 3.00
Supplement to patent application G 106756 VIIId/21c.

2872-2879 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Arrangement for the location of defective insulation in high-tension lines. German patent application K 137698 VIIId/21c, dated Mar 21, 1940. In German. 2.00
Diagrams.

2880-2884 PB L 83960 DEUTA-WERKE G.M.B.H., BERLIN. Measuring instrument capable of calibration. German patent application D 75055 VIIId/21c, dated Apr 13, 1938. In German. 2.00
Supplement to patent application D 66411 VIIId/21c.

2885-2888 PB L 83960 DEUTSCHE WAFFEN- UND MUNITIONSFABRIKEN A.G., BERLIN. Registration arrangement, especially for recording diagrams by means of cathode-ray tubes. German patent application D 81126 VIIId/21c, dated Aug 26, 1939. In German. 2.00
Supplement to Patent application D 80126 VIIId/21c.

2889-2893 PB L 83960 BOUCKE, H. (Inventor) Phase shifter, especially for electronic switches. German patent application B 199196 VIII d/21c, dated Jul 30, 1942. In German. 2.00
Diagram.

2894-2898 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Construction of push-buttons for electric measuring device. German patent application G 104433 VIIId/21c, dated Nov 21, 1941. In German. 2.00
Drawing.

2899-2902 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Core holder for moving coil instruments. German patent application G 103990 VIIId/21c, dated Aug 27, 1941. In German. 2.00
Supplement to patent application G 101 692 VIIId/21c.

2903-2906 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Measuring instrument with a square or nearly square housing. German patent application G 103382 VIIId/21c, Apr 17, 1941. In German. 2.00
Drawing.

2907-2911 PB L 83960 GRAV, J. (Inventor) Shockproof galvanometers. German patent application G 102590 VIIId/21c, dated Nov 21, 1940. In German. 2.00
Drawing.

2912-2914 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Housing for electric measuring devices. German patent application G 106756 VIIId/21c, dated Jan 7, 1943. In German. 2.00
Supplement to patent application G 103 669 VIIId/21c. Drawings.

2915-2921 PB L 83960 GÖRNITZ, O. (Inventor) Arrangement for reporting ground leakage. German patent application G 114765 VIIId/21c, dated Jan 24, 1942. In German. 2.00
Diagrams.

2922-2926 PB L 83960 P. GOSSEN & CO., G.M.B.H., ERLANGEN. Laminated pole piece for moving coil instruments with permanent magnets. German patent application G 106595 VIIId/21c, dated Dec 8, 1942. In German. 2.00
Drawings.

2927-2929 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT G.M.B.H., BERLIN. Core arrangement for transformers and the like. German patent application A 86172 VIIId/21c, dated Mar 16, 1938. In German. 2.00

2930-2933 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT G.M.B.H., BERLIN. Transformer for oscillographic presentation of direct and alternating currents. German patent application A 94908 VIIId/21c, dated Nov 19, 1941. In German. 2.00
Diagram.

2934-2940 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Ohmmeter for several orders of resistance magnitude. German patent application A 80406, VIIId/21c, dated Jul 21, 1939. In German. 2.00
Diagrams.

2941-2945 PB L 83960 ASKANIA-WERKE A.G, BERLIN. Measuring device arrangement with an electric tapping system. German patent application A 95865 VIIId/21c, dated Jun 25, 1942. In German. 2.00
Drawing.

2946-2947 PB L 83960 Special application of a switch for high voltages. German patent application B 195579 VIIId/21c, dated Sep 23, 1941. In German. 2.00
Supplement to patent application B 194 879 VIIId/21c.

2948-2954 PB L 83960 HARTMANN & BRAUN A.G., FRANKFURT/MAIN. Method for measuring electric valves. German patent application H 159085 VIIId/21c, dated Mar 15, 1939. In German. 2.00
Diagrams.

2955-2957 PB L 83960 ASKANIA-WERKE A.G., BERLIN. D-c voltage or d-c current amplifier for measuring purposes. German patent application A 94518 VIIId/21c, dated Nov 14, 1941. In German. 2.00
Supplement to patent application E 50 266 VIIId/21c.

2958-2962 PB L 83960 ASKANIA-WERKE A.G., BERLIN. D-c voltage or d-c current amplifier for measuring purposes. German patent application A 94517 VIId/21c, dated Nov 14, 1941. In German. 2.00
Supplement to patent application E 50 266 VIIId/21c.

2963-2970 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Arrangement for measuring direct currents. German patent application A 80687 VIIId/21c, dated May 16, 1942. In German. 2.00
Diagrams.

2971-2975 PB L 83960 ASKANIA-WERKE A.G., BERLIN. Arrangement for the amplification of d-c voltages and d-c currents for measuring purposes.

German patent application A 94516 VIII d/21c, dated Nov 14, 1941. In German. 2.00
Supplement to patent application E 50 266 VIII d/21c.

2976-2977 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Transformer. German patent application A 52214, dated Oct 14, 1927. In German. 2.00

2978-2993 PB L 83960 ATLAS-WERKE A.G., BREMEN. Vacuum tube voltmeter for d-c voltages. German patent application A 88235 VIII d/21c, dated Oct 5, 1938. In German. 3.00
Diagrams.

2994-3001 PB L 83960 FOCKE-WULF G.M.B.H., BREMEN. Portable device for testing transmission lines. German patent application F 90471, dated Sep 2, 1941. In German. 2.00
Drawings.

3002-3006 PB L 83960 DEUTSCHE FERNKABEL-GESELLSCHAFT M.B.H., BERLIN. Arrangement for measuring low frequency alternating currents. German patent application D 89967, dated Feb 11, 1943. In German. 2.00
Diagrams.

3007-3015 PB L 83960 FERNSCH G.M.B.H., BERLIN. Method for changing two or more electric pulses into a current or voltage impulses of longer duration. German patent application F 89904, dated Apr 18, 1941. In German. 2.00

3016-3021 PB L 83960 SIEMENS SCHUCKERTWERK A.G, BERLIN. Arrangement for testing and calibrating polyphase currents. German patent application S 144091, dated Feb 18, 1941. In German. 2.00
Diagram.

3022-3031 PB L 83960 SIEMENS-SCHUCKERTWERKE A.G., BERLIN. Testing device for conductors connected to bus bars. German patent application S 144050, dated Feb 13, 1941. In German. 2.00
Drawings.

3032-3038 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Electric measuring device arrangement. German patent application S 142321, dated Sep 17, 1940. In German. 2.00
Diagram.

3039-3045 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Arrangement for location of ground leaks or short circuits by means of a resistance measuring device connected to a safety device. German patent application S 142762, dated Oct 30, 1940. In German. 2.00
Diagram.

3046-3049 PB L 83960 SIEMENS SCHUCKERTWERKE A.G., BERLIN. Galvanometer. German patent application S 142859, dated Nov 7, 1940. In German. 2.00
Drawing.

3050-3053 PB L 83960 Arrangement for providing a circular calibration on cathode-ray oscillograph screens. German patent application R 105338 VIIId/21c, dated Feb 1, 1945. In German. 2.00

3054-3061 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Switch arrangement for stepwise regulation of the resistance of measuring devices. German patent application S 143708 VIIId/21c, dated Jan 18, 1941. In German. 2.00

3062-3065 PB L 83960 SIEMENS SCHUCKERTWERKE A.G., BERLIN Hysteresis peak indicator with a ring-type ferromagnetic body. German patent application S 143687 VIIId/21c, dated Jan 18, 1941. In German. 2.00
Drawing.

3066-3068 PB L 83960 SIEMENS & HALSKE A.G, BERLIN. Method of attaching electric measuring instruments to the dashboard, suitable for tropical use particularly for aircraft. German patent application S 143539 VIII d/21c, dated May 29, 1941. In German. 2.00

3069-3076 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Method for testing magnetic properties of material in sheet form. German patent application S 147145, dated Sep 29, 1941. In German. 2.00
Diagram.

3077-3083 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Arrangement for direct reading of deviations in rotational speeds from given percentages. German patent application S 146 340 VIIId/21c, dated Aug 25, 1941. In German. 2.00
Supplement to patent application S 133 066 VIIId/21c. Diagram.

3084-3089 PB L 83960 SIEMENS & HALSKE A.G., BERLIN. Arrangement for determination of the voltage ratio of a transformer in a compensation circuit. German patent application S 146339 VIIId/21c, dated Jun 25, 1943. In German. 2.00
Diagrams.

3090-3094 PB L 83960 BAERMAN, MAX, COLOGNE - DELLBRÜCK. Instrument for measuring magnetic field strength. German patent application B 201215, dated Jan 26, 1943. In German. 2.00
Drawings.

3095-3098 PB L 83960 ASKANIA-WERKE A.G., BERLIN. D-c amplifier for measuring purposes. German patent application dated Oct 31, 1941. In German. 2.00
Supplement to E 50266 VIIIa/21a.

3099-3104 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Arrangement for the generation of symmetrical saw-tooth oscillations. German patent application A 87787, dated Aug 11, 1938. In German. 2.00
Supplement to A 83448 VIIId/21c. Diagram.

3105-3113 PB L 83960 ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT M.B.H., BERLIN. Arrangement for producing a desired phase relationship in regard to a primary current or voltage. German patent application A 87859 VIII d/21c, dated Aug 19, 1938. In German. 2.00
Diagrams.

3114-3118 PB L 83960 ATLAS-WERKE A.G., BREMEN. A-c measuring bridge. German patent application A 97 725 VIII d/21c, dated Apr 5, 1943. In German. 2.00
Diagrams.

3119-3122 PB L 83960 ELEKTROFREQUENZ FRITZ SCHWARZER & CO., FALKENSEE-BERLIN. Balancing arrangement, particularly for indicators of electric measuring instruments. German patent application E 57978 VIII d/21c, dated Oct 25, 1943. In German. 2.00
Drawing.

3123-3126 PB L 83960 ERBSLÖH, P. AND VON WILLISEN, H., BERLIN. Arrangement for the compensation of phase angle difference of two voltages. German patent application dated Mar 7, 1941. Inventor: Pistsch, H. In German. 2.00

3127-3130 PB L 83960 ELEKTROFREQUENZ FRITZ SCHWARZER & CO., FALKENSEE-BERLIN. Modulation monitor, especially as a dashboard instrument. German patent application E 57620 VIII d/21c, dated Aug 26, 1943. In German. 2.00

3131-3136 ELEKTROFREQUENZ FRITZ SCHWARZER & CO.,

PB L 83960 FALKENSEE-BERLIN. Vacuum tube voltmeter with an ammeter in bridge form between voltage dividers, each of which contain at least one complete vacuum tube circuit. German patent application E 57619 VIII d/21c, dated Aug 25, 1943. In German. 2.00
Diagram.

3137-3145 ECKARDT, J.C. A.G., STUTTGART. Resistance for measuring devices and the like. German patent application E
PB L 83960 57598 VIII d/21c, dated Aug 20, 1943. In German. 2.00
Drawings.

3146-3149 ELEKTROFREQUENZ FRITZ SCHWARZER, FALKENSEE
PB L 83960 BERLIN. Aperiodical broad band-pass amplifier. German patent application E 58922 VIII d/21c, dated Feb 2, 1945. In German. 2.00
Diagram.

3150-3159 ELEKTROFREQUENZ FRITZ SCHWARZER, FALKENSEE
PB L 83960 BERLIN. Arrangement for the determination of phase shifts in a-c voltages. German patent application E 57875 VIII d/21c, dated Feb 19, 1945. In German. 2.00
Diagrams.

3160-3165 HARTMANN & BRAUN A.G., FRANKFURT/MAIN.
PB L 83960 Shielded d-c excited rotary magnet indicator. German patent application H 166764, dated Nov 10, 1941. In German. 2.00
Drawings.

3166-3169 HINDERER, HERMANN, BERLIN. Cathode-ray
PB L 83960 oscillograph with an electrode located in the beam direction and behind the deflecting system and forming with this system a combination electron lens. German patent application H 166160 VIII d/21c, dated Nov 12, 1941. In German. 2.00
Supplement to H 164017 VIII d/21c.
Drawing.

3170-3189 HSITHUS, G. (Inventor) Arrangement for
PB L 83960 monitoring current consumption of loads. German patent application H 166723 VIII d/21c, dated Nov 11, 1941. In German. 3.00
Drawings.

3190-3204 HARTMANN & BRAUN A.G., FRANKFURT/MAIN
PB L 83960 Device for the indication of the strength and phase relationship of weak currents. German patent application H 165337, dated May 8, 1941. In German. 3.00

3205-3208 HARTMANN & BRAUN A.G., FRANKFURT/MAIN.
PB L 83960 Dynamometric instrument. German patent application H 164566, dated Feb 13, 1941. In German. 2.00
Drawing.

3209-3210 HAGEDORN, R. (Inventor) Collapsible bi-
PB L 83960 cycle trailer. German patent application H 164280 VIII d/21c, date not given. In German. 2.00

3211-3215 HARTMANN & BRAUN A.G., FRANKFURT/MAIN.
PB L 83960 Electrostatic voltmeter. German patent application dated Mar 6, 1943. In German. 2.00
Supplement to H 164280 VIII d/21c.
Drawing.

3216-3220 HARTMANN & BRAUN A.G., FRANKFURT/MAIN.
PB L 83960 Arrangement for temperature regulation of crossed coil instruments. German patent application H 169219 VIII d/21c, dated Jan 9, 1941. In German. 2.00
Supplement to German patent application 690694. Diagrams.

3221-3224 Cathode-ray oscillograph. German pa-
PB L 83960 tent application H 164017, dated Dec 10, 1940. In German. 2.00
Supplement to H 154498 VIII d/21c.
Drawings.

3225-3232 HEITZ, J. (Inventor) Vacuum tube volt-
PB L 83960 meter with compensation and superimposition. German patent application H 163395, dated Oct 10, 1940. In German. 2.00
Diagrams.

PB L 83235. REICHSPATENTAMT, BERLIN. German patent applications on instruments. (FIAT Microfilm Reel B 57, Frames 7347-8203) 1937-1945. 857 f. Price: Microfilm-$7.00 - Enlargement print-$87.00
This reel, prepared by FIAT investigators in Germany, contains 117 applications of class 42. Individual items are listed below and will be available as enlargement prints. The entire reel may be purchased as a microfilm for $7.00. Please include PB and frame numbers when ordering individual items. In German.

Frames	Title	Price
7347-7378 PB L 83235	HEIDENWOLF, NEUMARKT. Electric fever thermometer. Ger. patent application H 174 963 IXb/42i dated Oct 2, 1944. In German.	$5.00
7379-7384 PB L 83235	HOESCH A.G., DORTMUND. Device for regulating the level of liquid in containers, wells, pits, etc. Ger. patent application H 174 992 IXb/42r dated Sep 30, 1944. In German.	2.00
7385-7393 PB L 83235	HANNEMANN K.G., BERLIN/FROHNAU. Regulating apparatus with hydraulic compensating motion. Ger. patent application H 169 211 dated Aug 15, 1942. In German.	2.00
7394-7399 PB L 83235	HERINGHAUS, EBERHARD (Inventor). Device for eliminating interfering noises when running sound films. Ger. patent application dated Jul 9, 1942. In German.	2.00
7400-7408 PB L 83235	HOPPE, WALTER (Inventor). Method for carrying out complicated calculations by establishing and connecting electric functiograms. Ger. patent application H 172 971 IXb/42m dated Nov 15, 1943. In German.	2.00
7409-7414 PB L 83235	Dynamic propeller balancing machine. Ger. patent application H 168 693 dated Jun 18, 1942. In German.	2.00
7415-7420 PB L 83235	HASEK, TAROSLAV (Inventor). Manometer for high tension gases, especially to determine the pressure of explosives. Ger. patent application H 165 941 dated Jul 28, 1941. In German.	4.00
7421-7428 PB L 83235	HEINKEL, ERNST, A.G., STUTTGART-ZUFFENHAUSEN. Testing device to determine the stability of swinging work pieces, especially compressor turbine blades. Ger. patent application H 173 449 IXb/42k dated Feb 17, 1944. Inventor: Beutele, Max. In German.	2.00
7429-7433 PB L 83235	HERRMANN, HANS, DARMSTADT. Device for determining the heavy side of the unbalance of machine parts, especially gyroscopic drivers while in motion. Ger. patent application H 173 477 dated Feb 17, 1944. In German.	2.00

7434-7437 PB L 83235 GRÄFE, PAUL, HANNOVER. Device for determining high pressure by means of a linearly expanded frictionless controlling instrument. Ger. patent application H 172 207 dated Jul 31, 1943. In German. 2.00

7438-7444 PB L 83235 HEIDERAN, OTTO (Inventor). Yarn testing apparatus. Ger. patent application 174 988 IXb/42k dated Sep 9, 1944. In German. 2.00

7445-7448 PB L 83235 Method for determining geological disturbances of all kinds by determining the local differences in radiation spread over the earths surface by means of ionization chambers or devices with quanta indicators. Ger. patent application G 108 071 IXb/42i dated Aug 31, 1943. In German. 2.00

7449-7455 PB L 83235 GILLET, HEINZ-LOTHAR and SECKLEHNER, VICTOR (Inventors). Adjustable inner limit gauge. Ger. patent application G 108 423 IXb/42b dated Nov 13, 1943. In German. 2.00

7456-7461 PB L 83235 GALONSKA, WALTER (Inventor). Gyroscopic compass for complete orientation. Ger. patent application G 108 444 IXb/42c dated Nov 20, 1943. In German. 2.00

7462-7470 PB L 83235 GLÖTZL, FRANZ (Inventor). Device for mechanically solving linear equations with several unknowns. Ger. patent application G 108 260 IXb/42m dated Oct 14, 1943. In German. 2.00

7471-7475 PB L 83235 HARTMANN UND BRAUN, FRANKFURT A.M. Device for the straight running of a pointer or especially a writing pen in measuring instruments. Ger. patent application H 170 186 IXb/42d, n.d. In German. 2.00

7476-7478 PB L 83235 HEINE, HEINRICH (Inventor). Elliptograph. Ger. patent application H 170 230 dated Dec 10, 1942. In German. 2.00

7479-7491 PB L 83235 HOSPODKA, GOTTFRIED (Inventor). Fully automatic double pendulum household balance with inclination weight with swing curve keys indicator regulation. Ger. patent application dated Mar 9, 1944. In German. 3.00

7492-7495 PB L 83235 HÖHING, HERMANN (Inventor). Recording milk hydrometer. Ger. patent application H 170 914 dated Feb 24, 1943. In German. 2.00

7496-7497 PB L 83235 HIRSCHLER, FRANZ (Inventor). Automatic inclination balance. Ger. patent application H 169 492 dated Nov 19, 1942. In German. 2.00

7498-7504 PB L 83235 HEINKEL, ERNST, VIENNA. Magneto inductive testing method for finding defects in the interior of rods. Ger. patent application H 172 430 dated Sep 6, 1943. In German. 2.00

7505-7510 PB L 83235 HEINKEL, ERNST, ROSTOCK. Method of testing work pieces for inter- and intra-crystalline corrosion or tension corrosion. Ger. patent application H 175 538 IXb/42k dated Feb 9, 1945. In German. 2.00

7511-7519 PB L 83235 HARTMANN UND BRAUN, FRANKFURT/M. Membrane measuring body for manometers and difference manometers, especially for low pressure. Ger. patent application H 172 342 IXb/42h dated Aug 21, 1943. In German. 2.00

7520-7526 PB L 83235 HORN, ERHARD (Inventor). Artificial horizon with a full independently suspended gyroscope supported at the center of gravity and a remotely controlled indicator scale for airplanes. Ger. patent application H 167 118 IXb/42c dated Dec 22, 1941. In German. 2.00

7527-7545 PB L 83235 Indicator for the rate valuation of energy consumption, especially electricity. Ger. patent application G 96 756 dated Nov 27, 1937. In German. 3.00

7546-7550 PB L 83235 GÖTZ, CARL (Inventor). Measuring instruments for inner threads. Ger. patent application G 97 142 dated Jan 21, 1938. In German. 2.00

7551-7558 PB L 83235 FUCHS, W. (Inventor). Precurrent device as anemometer, manometer, linear measuring instrument, and microphone. Ger. patent application F 92 716 dated Oct 26, 1942. In German. 2.00

7559-7566 PB L 83235 FUCHS, W. (Inventor). Apparatus for glow discharge free of burning losses for anemometry, pressure and linear measuring, and for use as a microphone. Ger. patent application F 92 717 IXb/42o dated Oct 26, 1942. In German. 2.00

7567-7570 PB L 83235 FISCHER, KARL (Inventor). Spectacles for use in gas masks. Ger. patent application F 92 735 IXa/42h dated Oct 30, 1942. In German. 2.00

7571-7576 PB L 83235 GROTHKOPP, WALTER (Inventor). Indicator measuring device giving impulses at certain indicator positions. Ger. patent application G 99 127 IXb/42b dated Dec 10, 1938. In German. 2.00

7577-7584 PB L 83235 GERBER'S, N., CO., M.B.H., LEIPZIG. Device for serially measuring liquids, especially sulfuric acid. Ger. patent application supplement No. 94 160 IXb/42 l for main patent No. 699 606 dated Dec 31, 1942. Inventor: Roeder, Georg. In German. 2.00

7585-7592 PB L 83235 GEHRE, HANS (Inventor). Auxiliary indicator for measuring instruments (flow meters, Woltmann meters, capsule meters, etc.) to determine the speed of liquids and gases. Ger. patent application G 94 816 dated Feb 16, 1937. In German. 2.00

7593-7597 PB L 83235 GROTHKOPP, WALTER (Inventor). Automatic device for controlling the dimensions of production parts. Ger. patent application G 99 152 IXb/42b dated Dec 15, 1938. In German. 2.00

7598-7604 PB L 83235 GRAF, FRITZ (Inventor). Method and device to assort glass tubes having equal diameters according to their wall thickness. Ger. patent application G 101 860 dated Jun 15, 1940. In German. 2.00

7605-7608 PB L 83235 HILBERT, ERWIN (Inventor). Adjustable supply of India ink or dyes for drawing. Ger. patent application H 169 191 dated Aug 11, 1942. In German. 2.00

7609-7611 PB L 83235 HOF, KURT (Inventor). New method of producing drawings. Ger. patent application H 164 177 dated Apr 27, 1944. In German. 2.00

7612-7615 PB L 83235 HÖHING, HERMANN (Inventor). Instrument for quickly measuring the bottom thickness of deep containers. Ger. patent application G 170 014 IXb/42b dated Nov 20, 1942. In German. 2.00

7616-7622 PB L 83235 HÖHING, HERMANN (Inventor). Measuring device with measuring instrument and gauge block for controlling the dimensions of a work piece. Ger. patent application H 170 005 IXb/42b dated Nov 19, 1942. In German. 2.00

7623-7627 PB L 83235 HEINKEL, ERNST, ROSTOCK. Device for controlling or checking the position of tilted bodies, especially blades for the accessories of a gyroscopic machine. Ger. patent application H 169 996 dated Nov 22, 1942. In German. 2.00

7628-7634 PB L 83235 HÖHING, HERMANN (Inventor). Measuring device with measuring instruments for simultaneously measuring height and depth of production parts. Ger. patent application H 169 971 IXb/42b dated Nov 16, 1942. In German. 2.00

7635-7639 PB L 83235 HÖRAUF, MICHAEL (Inventor). Support for dial indicators for testing cubic measures. Ger. patent application H 164 997 dated Mar 26, 1941. In German. 2.00

7640-7647 PB L 83235 HEYMANN, HANS (Inventor). Process to improve the position of rest in gyroscopic instruments while taking into account the grooves of the ball bearing races. Ger. patent application G 170 526 IXb/42c dated Jan 14, 1943. In German. 2.00

7648-7653 PB L 83235 HORN, ERHARD (Inventor). Support with soldering agent for cardanically suspended gyroscopes. Ger. patent application H 167 519 IXb/42c dated Feb 11, 1942. In German. 2.00

7654-7657 PB L 83235 HEYMANN, HANS (Inventor). Artificial horizon - zinc gyroscopic. Ger. patent application H 168 435 IXb/42c dated May 20, 1942. In German. 2.00

7658-7663 PB L 83235 HAPPACH (Inventor). Device for the mechanical evaluation of functional relations. Ger. patent application H 173 106 IXb/42m dated Dec 18, 1943. In German. 2.00

7664-7668 PB L 83235 HOLZ, KASPAR (Inventor). Indicator for fire extinguishing purposes, especially to determine the supply of power sprayers. Ger. patent application dated Jul 13, 1944. In German. 2.00

7669-7682 PB L 83235 FORSCHUNGS- UND LEHRGEMEINSCHAFT "DAS AHNENERBE" E.V., BERLIN-DAHLEM. Device for approximately estimating height and azimuth angles, especially of stars to determine their course. Ger. patent application F 93 225 dated Jan 25, 1943. In German. 3.00

7683-7702 PB L 83235 GEHRE, HANS (Inventor). Auxiliary device for flow meters to exactly measure the speed of gases. Ger. patent application G 95 989 dated Aug 6, 1937. In German. 3.00

7703-7709 PB L 83235 GEISDORF, EWALD (Inventor). Device for phaseless reflection of high frequency sound waves in a parabolic funnel. Ger. patent application G 96 717 dated Nov 20, 1937. In German. 2.00

7710-7714 PB L 83235 GOEBBELS, HERMANN (Inventor). Process and device to determine the pressure in flow pipe lines, e.g., fuel pipes between injection pump and nozzle of internal combustion engines. Ger. patent application G 100 805 dated Oct 13, 1939. In German. 2.00

7715-7731 PB L 83235 GEHRE, HANS (Inventor). Device for regulating the working of the measuring cylinder in a volumeter (flow meters, Woltmann meter, etc.), the measuring cylinder being put into rotation by the current to be measured. Ger. patent application G 100 829 dated Oct 23, 1939. In German. 3.00

7732-7741 PB L 83235 Semiautomatic test shell with a gas adsorption agent and chemical reagents for air- and gas examination. Ger. patent application G 100 967 dated Nov 24, 1939. In German. 2.00

7742-7746 PB L 83235 GAEDE (Inventor). Method of determining the tensile state within a continuum, especially within concrete construction parts. Ger. patent application G 101 445 dated Mar 12, 1940. In German. 2.00

7747-7751 PB L 83235 GIESECKE, HERMANN and TUNGK, HUGO (Inventors). Indexing for index heads.. Ger. patent application G 101 511 dated Mar 28, 1940. In German. 2.00

7752-7759 PB L 83235 GEHRE, HANS (Inventor). Shaft bearing, especially for shafts of measuring instruments with rotary measuring agents showing little actuating power. Ger. patent application G 99 988 IXb/42c dated Apr 29, 1939. In German. 2.00

7760-7764 PB L 83235 Method for measuring liquids in containers, especially for airplanes. Ger. patent application G 100 151 IXb/42e dated May 31, 1939. In German. 2.00

7765-7767 PB L 83235 GRÜTZMACHER, JOHANNES (Inventor). Electrode for piezo crystal for sound producers. Ger. patent application G 100 402 IX/42s dated Jul 10, 1939. In German. 2.00

7768-7774 PB L 83235 GAEDE, WOLFGANG (Inventor). Projecting equipment, especially

for small and light indicators. Ger. patent application G 100 464 IIa/42h dated Jul 24, 1939. In German. 2.00

7775-7783 PB L 83235 Affinograph for drawing curves according to a reduced or increased scale. Ger. patent application dated Jan 14, 1944. In German. 2.00

7784-7789 PB L 83235 Manufacture of models (or the like), especially for wind and water tunnel tests. Ger. patent application not dated. In German. 2.00

7790-7795 PB L 83235 HENCKELS, I.S., SOLINGEN. Device in automatic razor blade machines for counting and distributing a given number of blades. Ger. patent application G 172 767 dated Oct 22, 1943. In German. 2.00

7796-7804 PB L 83235 HAUSMANN, HANS (Inventor). Magnifier. Ger. patent application H 171 949 dated Jun 26, 1943. In German. 2.00

7805-7808 PB L 83235 HÄNEL, H. (Inventor). Thermostat. Ger. patent application H 171 923 dated Jun 22, 1943. In German. 2.00

7809-7815 PB L 83235 HOTZMER, FERDINAND (Inventor). Time regulator to control the manufacturing time of mass products. Ger. patent application H 173 113 dated Dec 20, 1943. In German. 2.00

7816-7821 PB L 83235 HENNICKE and BOSSEL (Inventors). Process and device for taking and viewing stereoscopic film strips. Ger. patent application dated Mar 14, 1944. In German. 2.00

7822-7826 PB L 83235 HOTER, HERMANN (Inventor). Involute circle for marking rolled profile templates. Ger. patent application H 168 429 dated Dec 31, 1942. In German. 2.00

7827-7829 PB L 83235 HILLRINGHAUS, HERMANN (Inventor). Graduated circle. Ger. patent application H 166 563 dated Oct 22, 1941. In German. 2.00

7830-7835 PB L 83235 Bilateral snap gauge. Ger. patent application G 98 181 IXb/42b dated Jul 1, 1938. In German. 2.00

7836-7842 PB L 83235 GEWERKSCHAFT PAULINENHÜTTE, ESSEN. Electric miner's lamp with methane indicator. Ger. patent application G 95 350 IXb/42 1 dated Sep 12, 1938. In German. 2.00
First supplementary patent application G 98 622 IXb/42 1 to main patent application.

7843-7847 PB L 83235 GEWERKSCHAFT PAULINENHÜTTE, ESSEN. Electric miner's lamp with fire damp indicator. Ger. patent application G 95 350 IXb/42 1 dated Oct 21, 1938. In German. 2.00
Second supplementary patent application G 98 827 IXb/42 1 to main patent application.

7848-7850 PB L 83235 GÖTZ, KARL (Inventor). Measuring instrument for internal threads. Ger. patent application supplementary No. G 98 960 to main patent application G 97 142 II/42b dated Nov 18, 1938. In German. 2.00

7851-7860 PB L 83235 GERBER'S, N., CO., M.B.H., LEIPZIG. Stop cock for liquids. Ger. patent application supplementary No. G 98 965 IXb/42 1 to main patent application G 98 397 XII/47g, n.d. In German. 2.00

7861-7866 PB L 83235 GERHARDT, OSCAR (Inventor). Optical height indicator for airplanes. Ger. patent application G 100 690 IXb/42c dated Sep 11, 1939. In German. 2.00

7867-7875 PB L 83235 CASTELL, A.W. FABER, STEIN BEI NÜRNBERG. Holder for slide rules, especially for one handed individuals. Ger. patent application F 94 133 IXb/42m dated Jul 16, 1943. In German. 2.00

7876-7879 PB L 83235 FIESELER, GERHARD, G.M.B.H., KASSEL. Back pressure meter for airplanes. Ger. patent application F 94 136 dated Jul 15, 1943. In German. 2.00

7880-7885 PB L 83235 GUTEHOFFNUNGSHÜTTE, OBERHAUSEN. Device for transmission of moving operations, especially oscillations of inaccessible points to a measuring instrument. Ger. patent application G 103 066 IXb/42d, n.d. In German. 2.00

7886-7903 PB L 83235 GOEBBELS, HERMANN (Inventor). Process and device to determine and control the load limits on durability testing machines. Ger. patent application G 103 024 dated Feb 17, 1941. In German. 3.00

7904-7910 PB L 83235 GUTEHOFFNUNGSHÜTTE, OBERHAUSEN. Measuring instrument for testing the position of the flank angle of threaded work pieces. Ger. patent application G 103 082 dated Feb 24, 1941. In German. 2.00

7911-7914 PB L 83235 GREINER, JOSEF (Inventor). Device to prevent pressure on the bearing in compasses. Ger. patent application G 102 315 dated Sep 26, 1940. In German. 2.00

7915-7925 PB L 83235 GEHRELS, CHARLOTTE (Inventor). Process for manufacturing aluminum and light metal solders. Supplementary patent application G 102 329 to main application H 161 465 VI/40b dated Oct 1, 1940. In German. 3.00

7926-7929 PB L 83235 GESELLSCHAFT FÜR KOHLENTECHNIK, DORTMUND. Method for measuring the pH of reduction liquids by means of antimony electrodes. Ger. patent application G 101 079 IXb/42 1 dated Dec 21, 1939. In German. 2.00

7930-7936 PB L 83235 FIMBINGER, JIRI (Inventor). Universal distilling apparatus for pharmacy laboratories. Ger. patent application F 94 758 IXb/42 1 dated Jan 13, 1944. In German. 2.00

7937-7941 FORSCHUNGSINSTITUT FÜR KRAFT-

PB L 83235 FAHRWESEN TECHN. HOCHSCHULE, STUTTGART. Method for measuring the speed of a land vehicle. Ger. patent application F 94 759 IXb/42c, n.d. In German. 2.00

7942-7949 FOCKE-WULF FLUGZEUGBAU, BREMEN.
PB L 83235 Device to examine machine parts of the like with rays detrimental to health. Ger. patent application F 94 812 dated Feb 28, 1944. In German. 2.00

7950-7954 GÖDDERT, KURT (Inventor).
PB L 83235 Slide rule. Ger. patent application G 103 178 dated Mar 13, 1941. In German. 2.00

7955-7959 GÖDDERT, KURT (Inventor).
PB L 83235 Slide rule with a scanning device. Ger. patent application G 103 290 dated Apr 1, 1941. In German. 2.00

7960-7967 GEHRE, HANS (Inventor). Bearing for shafts of spiral gear
PB L 83235 gas meters, flow meters, capsule meters, etc. Ger. patent application G 97 897 dated May 20, 1938. In German. 2.00

7968-7991 GEHRE, HANS (Inventor). Measuring device based on the flow prin-
PB L 83235 ciple for measuring the quantity of different gases or liquids. Ger. patent application G 98 026 IXb/42e dated Jun 11, 1938. In German. 4.00

7992-8017 GEHRE, HANS (Inventor). Measuring device based on the principle
PB L 83235 of speed measurement to measure the quantity of gases and liquids. Supplementary patent application G 98 173 IXb/42e to main patent application G 98 026 IXb/42e. n.d. In German. 4.00
See frames 7968-7991.

8018-8022 FORNET, ARTUR (Inventor).
PB L 83235 Apparatus for testing tensile strength and tenacity. Ger. patent application 94 565 IXb/42 1 dated Nov 15, 1943. In German. 2.00

8023-8025 FICHTEL U. SUCHS, SCHWEINFURT.
PB L 83235 Instrument for testing elastic bodies. Ger. patent application F 94 589 IXb/42k dated Nov 22, 1943. In German. 2.00

8026-8031 FUSS, JOHANN (Inventor).
PB L 83235 Device to test bodies, especially bodies which are to turn about on a neutral axis, for their static equilibrium in relation to the neutral axis. Ger. patent application F 94 598 IXb/42k dated Nov 24, 1943. In German. 2.00

8032-8034 FISCHER, HANS (Inventor).
PB L 83235 Caliper for determining the diameter of trunks. Ger. patent application F 94 635 IXb/42b dated Dec 6, 1943. In German. 2.00

8035-8037 GERACH, HEINRICH (Inventor).
PB L 83235 Instrument to detect impurities and floating substances in liquids. Ger. patent application G 104 862 IXb/42 1 dated Feb 16, 1942. In German. 2.00

8038-8043 GERBER'S, N., CO., M.B.H., LEIPZIG.
PB L 83235 Testing instrument for small liquid quantities. Ger. patent application G 106 870 IXb/42 1 dated Jan 29, 1943. In German. 2.00

8044-8048 GREINER, JOSEF (Inventor).
PB L 83235 Earth inductor compass. Ger. patent application G 109 680 IXb/42c dated Jul 27, 1944. In German. 2.00

8049-8052 GERMER, WALTER (Inventor).
PB L 83235 Electronic optical equipment for transverse photoelectric recording of sound on photo-sensitive layers. Second supplementary patent application G 106 535 to main patent application of the 19.10.42 dated Nov 30, 1942. In German. 2.00

8053-8059 GROSSMANN, RICHARD (Inventor).
PB L 83235 Apparatus to facilitate the reading of the level in liquid columns. Ger. patent application G 106 562 IXb/42e dated Dec 2, 1942. In German. 2.00

8060-8074 GRÜTER, KARL (Inventor). Measuring apparatus for motor fuel supply.
PB L 83235 Ger. patent application G 105 449 dated May 27, 1942. In German. 3.00

8075-8084 GRAH, CARL (Inventor). Key type calculating machine with
PB L 83235 auxiliary drive. Ger. patent application G 104 498 IXb/42m dated Dec 8, 1941. In German. 3.00

8085-8088 Method for measuring fermentation gases. Ger. patent ap-
PB L 83235 plication 104 427 IXb/42 1 dated Nov 25, 1941. In German. 2.00

8089-8094 GIACOBBE, BARTOLI and CANEPA,
PB L 83235 PIETRO (Inventors). Device for weighing and assorting projectiles or similar objects. Ger. patent application G 104 715 dated Jan 19, 1942. In German. 2.00

8095-8104 GEHRE, HANS (Inventor). Woltman
PB L 83235 meter (for gases or liquids). Ger. patent application G 104 706 dated Jan 19, 1942. In German. 2.00

8105-8107 HETER (Inventor). Equipment
PB L 83235 and device for measuring the rate of flow of gases in pipe lines. Ger. patent application H 162 258 dated May 10, 1940. In German. 2.00

8108-8115 GRASS UND WORFF, BERLIN.
PB L 83235 Piezo-electric bending cell. Ger. patent application G 103 931 dated Aug 17, 1942. In German. 2.00

8116-8120 GÜNTHER, W. (Inventor). Elec-
PB L 83235 tric eddy current revolution indicator. Ger. patent application G 106 213 dated Oct 7, 1942. In German. 2.00

8121-8132 GRAF, WILHELM (Inventor).
PB L 83235 Device for influencing the reading accuracy and/or oscillating time of light indicating measuring instruments, especially of light marking galvanometers. Ger. patent application G 106 347 dated Oct 24, 1942. In German. 3.00

8133-8142 GLÖTZL, MAX (Inventor). Book-
PB L 83235 like foldable maps (or similar papers) and method for their manufacture and folding. Ger. patent application G 106 344 dated Oct 31, 1942. In German. 2.00

8143-8145 GRABER, G. (Inventor). Uni-
PB L 83235 versal measuring and scribing tool. Ger. patent application G 102 648 dated Dec 4, 1940. In German. 2.00

Patents (contd)

8146-8152 PB L 83235 GRAN, JOSEF (Inventor). Contact thermometer. Supplementary patent application G 102 386 to main patent application G 100 108 IXb/42c dated Feb 7, 1941. In German. 2.00

8153-8158 PB L 83235 GHEORGHIN, G. (Inventor). Quinhydrone electrode for measuring the hydrogen ion concentration (pH) of liquids. Ger. patent application G 102 976 IXb/42 l dated Feb 7, 1941. In German. 2.00

8159-8166 PB L 83235 GERBER'S, M., CO., M.B.H., LEIPZIG. Centrifuge for fat determination. Ger. patent application G 102 960/42 l dated Feb 5, 1941. Inventor: Roeder, Georg. In German. 2.00

8167-8172 PB L 83235 LOEWE, BERLIN. Adjustable gauge for testing filletings. Ger. patent application G 103 576 IXb/42b dated May 27, 1941. In German. 2.00

8173-8181 PB L 83235 GRAHL, E.H.DE (Inventor). Device for measuring the recoil of fire arms. Ger. patent application G 105 527 dated Jun 12, 1942. In German. 2.00

8182-8188 PB L 83235 GERÄTE-ENTWICKLUNG, ALBRECHT W. TRONNIER, GÖTTINGEN. Optical system for reconnoitering by means of invisible light. Ger. patent application dated Aug 13, 1943. In German. 2.00

8189-8197 PB L 83235 GESELLSCHAFT FÜR TECHNISCH-WIRTSCHAFTLICHE ENTWICKLUNG, REICHENAU BEI GABLONZ. Orientation device for power driven vehicles, especially for night driving. Ger. patent application G 105 070 dated Mar 20, 1942. In German. 2.00

8198-8203 PB L 83235 Magneto inductive test method to detect defects, especially in longitudinal magnetizable production parts. Ger. patent application G 105 245 dated Jun 5, 1942. In German. 2.00

MISCELLANEOUS

PB L 70438 DEUTSCHES MUSEUM, MUNICH, GERMANY. German patents in various fields. (FIAT Microfilm Reel E 35, Frames 4-487) 1930-1942. 483 f. Price: Microfilm-$5.75 - Enlargement Print-$48.50.
This microfilm reel consists of 158 patents issued by the German Patent Office from May to December 1944. The patent numbers range from 746201 to 746400 (some patents are missing); patent number 746983 is included. Individual patents are listed below and will be available as enlargement prints only; the entire reel may be purchased in microfilm form for $5.75. Please include PB, patent and frame numbers when ordering individual items. In German.

Frames	Title	Price
4-6 PB L 70438	OSRAM G.M.B.H. K.G., BERLIN. Ultra violet radiation device with a metal-vapor high-pressure lamp serving as a source of ultraviolet rays and a series resistance serving as a heat element. Ger. patent 746201, dated Jun 13, 1944. Application S 121987 VIIIc/21g, dated Mar 18, 1936. Inventor: Spanner, H. In German. Wiring diagrams.	$ 1.50
7-8 PB L 70438	PORSCHKE, F.K.G., STUTTGART. Gas producer for automobiles. Ger. patent 746203, dated Dec 9, 1944. Application P 80976 V/24e, dated Jun 30, 1940. Inventor: Kommenda, E. In German. Drawings.	1.50
9-11 PB L 70438	BARTLET, E., & KALINOWSKI, B. (Inventors). Vertical refractory retort. Ger. patent 746204, dated Jun 8, 1944. Application B 196945 VIb/26a, dated Feb 1, 1942. In German. Drawings.	1.50
12-15 PB L 70438	I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Safety housing for viscose rayon fiber spinning and finishing machines. Ger. patent 746205, dated Jun 13, 1944. Application I 63178 VII/29a, dated Dec 16, 1938. Inventor: Reichel, O. In German. Drawings.	1.50
16-17 PB L 70438	BARMER MASCHINENFABRIK A. G., WUPPERTAL. Device for continuous after-treatment of rayon thread. Ger. patent 746206, dated May 27, 1944. Application B 191094 VII/29a, dated Jul 5, 1940. Inventor: Bochmann, O. In German. Drawing. Supplement to patent 740392.	1.50
18-19 PB L 70438	RATHGEBER, KARL, KIRCHHAUSEN. Arch support made of fibrin impregnated with thermoplastic synthetic resin. Ger. patent 746207, dated Jun 5, 1944. Application Z 25050 IXa/30d, dated Jan 24, 1939. Inventor: Zwahl, A. In German.	1.50
20-21 PB L 70438	DREHSEN & DREESBACH, DÜSSELDORF. Equipment for manufacture of sanitary napkins. Ger. patent 746208, dated Jun 5, 1944. Application D 84917 IXa/30d, dated Apr 22, 1941. Inventor: Drehsen, W. In German. Drawing.	1.50
22-23 PB L 70438	I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Vacuum furnace. Ger. patent 746210, dated Jun 5, 1944. Application I 70357 VIa/31a, dated Jul 16, 1940. Inventors: Iwowski, V., & Quedzuweit, K. In German. Drawing.	1.50
24-26 PB L 70438	WIELAND WERKE, A. G. ULM. Device for casting pipe-strings. Ger. patent 746211, dated Jun 15, 1944. Application W 104036 VIa/31c, dated Aug 3, 1938. In German. Drawings.	1.50
27-29 PB L 70438	METALLGESELLSCHAFT A. G., FRANKFURT A. M. Pressure casting machine for metals in a thinly-liquid state. Ger. patent 746212, dated Jun 15, 1944. Application M 150064 VIa/31c, dated Nov 23, 1941. Inventor Miller, W. In German. Drawings.	1.50
30-33 PB L 70438	KOHLE U. EISENFORSCHUNG G.M.B.H., DÜSSELDORF. Hoisting cable. Ger. patent 746214, dated Jun 19, 1944. Application K 158737 XI/35a, dated Sep 19, 1940. Inventor: Daeves, K. In German. Drawing.	1.50

34-35
PB L 70438
I. G. FARBENINDUSTRIE A. G., ET AL, FRANKFURT A. M. Electrolytic zinc production. Ger. patent 746215, dated Dec 9, 1944. Application I 58729 VIa/40c, dated Aug 4, 1937. Inventors: Kuss, E., & Hohn, H. In German. 1.50
Supplement to patent 711392.

36-37
PB L 70438
SIEMENS APPARATE U. MASCHINEN G.M.B.H., BERLIN. Electrically operated gyro. Ger. patent 746217, dated Jun 17, 1944. Application S 136729 IXb/42c, dated Apr 13, 1939. Inventor: Wirth, W. In German. 1.50
Drawings.

38-40
PB L 70438
SIEMENS APPARATE U. MASCHINEN G.M.B.H., BERLIN. Underwater current indicator for great depths. Ger. patent 746218, dated Jun 5, 1944. Application S 143800 IXb/42c, dated Jan 30, 1941. Inventor: Fielitz, W. In German. 1.50
Drawing.

41-42
PB L 70438
SIEMENS SCHUCKERTWERKE A. G., BERLIN. Mean valve computer. Ger. patent 746220, dated Jun 17, 1944. Application S 131915 IXc/42d, dated May 1, 1938. Inventor: Franck, S. In German. 1.50
Drawings.

43-44
PB L 70438
ZEISS, CARL CO., JENA. Device to prevent growth of microorganisms in optical instruments. Ger. patent 746222, dated Jun 15, 1944. Application Z 26617 IXa/42h, dated Sep 14, 1941. Inventors: Calsow, G., & Riedinger, F. In German. 1.50
Supplement to patent 686281.

45-46
PB L 70438
I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Manufacturing process for high-pressure manometer springs. Ger. patent 746223, dated Jun 17, 1944. Application I 56926 IXb/42k, dated Jan 21, 1937. Inventor: Seiferheld, H. In German. 1.50

47-49
PB L 70438
PATENT TREUHAND GES. FÜR ELEKTRISCHE GLÜHLAMPEN M.G.H., BERLIN. Radiometer. Ger. patent 746225, dated Jun 19, 1944. Application P 77888 IXb/42k, dated Sep 10, 1938. Inventor: Piltz, E. In German. 1.50
Drawings.

50-52
PB L 70438
BROSA, E. (Inventor). Device to measure elongation and torsion of statically or dynamically stressed structural parts. Ger. patent 746226, dated Jun 19, 1944. Application D 84896 IXb/42k, dated Apr 20, 1941. In German. 1.50
Drawings.

53-55
PB L 70438
AMERCHN, R. (Inventor). Leak detection device for water mains. Ger. patent 746229, dated Jun 5, 1944. Application A 94924 IXb/42k, dated Jan 29, 1942. In German. 1.50

56-57
PB L 70438
BÜSING, E. & HORSTMANN, J., SCHWARME. Apparatus for measuring and drawing off milk samples in series. Ger. patent 746230, dated Jun 5, 1944. Application B 187564 IXb/42 1, dated Jun 4, 1939. Inventor: Büsing, R. In German. 1.50
Drawings.

58-75
DEUTSCHE HOLLERITH MASCHINEN

PB L 70438
G.M.B.H., BERLIN. Calculating machine. Ger. patent 746231, dated Jun 8, 1944. Application I 59670 IXb/42m, dated Nov 21, 1937. Inventor: Chick, T. In German. 1.50
Drawings.

76-84
PB L 70438
DEUT[illegible]OLLERITH MASCHINEN, G.[illegible] BERLIN. Punch-card operated tabulating machine. Ger. patent 746232, dated Jul 29, 1944. Application D 78491 IXb/43a, dated Jul 27, 1930. Inventor: Maul, M. In German. 1.50
Drawings.

85-92
PB L 70438
DEUTSCHE HOLLERITH MASCHINEN G.M.B.H., BERLIN. Punch-card operated stencilling device. Ger. patent 746233, dated Jul 29, 1944. Application M 135580 IXb/43a, dated Sep 1, 1936. In German. 1.50
Drawings. Supplement to patent 687935.

93-102
PB L 70438
POWERS G.M.B.H., BERLIN. Paper feeding mechanism for tabulating machines. Ger. patent 746234, dated Jul 29, 1944. Application P 71675 IXb/43a, dated Aug 21, 1935. In German. 1.50
Drawings.

103
PB L 70438
SIEMENS & HALSKE A.E., BERLIN. Chrome electrolyte containing hydrofluoric acid. Ger. patent 746236, dated Jul 29, 1944. Application S 143653 VIA/48a, dated Jan 17, 1941. Inventor: Fischer, J. In German. 1.50

104-105
PB L 70438
STUCKERT, L. (Inventor). Acid-resistant enamel. Ger. patent 746237, dated Jun 5, 1944. Application St 56560 VIb/48c, dated Sep 2, 1937. In German. 1.50

106-107
PB L 70438
JACOBI, A. (Inventor). Alkaline degreasing agent for metals. Ger. patent 746238, dated Jun 5, 1944. Application J 70332 VIA/48d, dated Aug 27, 1941. In German. 1.50

108-110
PB L 70438
KERB-KONUS GES. DR. CARL EISES & CO., DRESDEN. Mechanism for feeding pins, nails, etc., from a supply bin. Ger. patent 746239, dated Jun 5, 1944. Application K 155237 Ib/49c, dated Aug 1, 1939. In German. 1.50
Drawings.

111-112
PB L 70438
MAHLE K. G. STUTTGART. Punch for stamping engine pistons. Ger. patent 746240, dated Dec 9, 1941. Application M 150432 IB/491, dated Apr 1, 1941. Inventor: Brenner, W. In German. 1.50
Drawings.

113-114
PB L 70438
VAN NESTE, A., & DE BISSCHOP, R. (Inventors). Violin. Ger. patent 746242, dated Jun 17, 1944. Application N 44368 IXa/51c, dated Dec 4, 1940. In German. 1.50
Drawing.

115-116
PB L 70438
ZWIONZEK, F. (Inventor). Double-tube reed mouthpiece (for wind instruments). Ger. patent 746243, dated Jun 17, 1944. Application Z 26613 IXa/51c, dated Sep 14, 1941. In German. 1.50
Drawings.

117-121
PB L 70438

GOEBEL A. G., DARMSTADT. Dual roller arrangement for paper, etc. Ger. patent 746245, dated May 31, 1944. Application G 103353 VII/55e, dated Apr 13, 1941. Inventor: Köhler, W. In German. 1.50
Drawings.

122-124
PB L 70438

KORESKA, W. (Inventor). Carbon paper with reinforced edges. Ger. patent 746246, dated Jun 19, 1944. Application K 160904 VII/55 f, dated Apr 25, 1941. In German. 1.50
Drawings.

125-128
PB L 70438

TELEFONAKTIEBOLAGET L. M. ERICSSON, STOCKHOLM, SWEDEN. Sound transmitter (alarm device). Ger. patent 746247, dated Jun 19, 1944. Application T 54933 VIIIb/74d, dated Feb 12, 1941. Inventor: Bjergel, S. In German. 1.50
Drawings.

129-131
PB L 70438

BOSCH, ROBERT G.M.B.H., STUTTGART. Electro-acoustical overtaking signal for vehicles. Ger. patent 746248, dated Jun 19, 1944. Application B 186764 VIIIb/74d, dated Mar 23, 1939. Inventor: Schmidt, O. In German. 1.50
Wiring diagrams.

132-133
PB L 70438

TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT A. M. Circuit for dial telephone system with several series-connected switching centrals. Ger. patent 746252, dated Jun 15, 1944. Application T 50395 VIIIa/21a^3, dated May 19, 1938. Inventor: Hebel, M. In German. 1.50

134-137
PB L 70438

TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT A. M. Circuit for dial telephone system with several channels of communication. Ger. patent 746253, dated Jun 15, 1944. Application T 50230 VIIIa/21a^3, dated Apr 6, 1938. Inventor: Heibel, E. In German. 1.50
Wiring diagram.

138-140
PB L 70438

TELEFONBAU UND NORMALZEIT G.M.B.H., FRANKFURT A. M. Device for automatic transmission of signals in dial telephone systems with calling-subscriber registration. Ger. patent 746255, dated Jun 15, 1944. Application T 51401 VIIIa/21a^3, dated Dec 1, 1938. Inventors: Wirth, A., & Hebel, M. In German. 1.50
Wiring diagrams.

141-142
PB L 70438

SIEMENS & HALSKE A. G., BERLIN. Method for frequency-stable A.C. transmission over carrier frequency systems. Ger. patent 746256, dated Jun 17, 1944. Application S 135506 VIIIa/21a^2, dated Jan 22, 1939. Inventor: Krans, G. In German. 1.50

143-145
PB L 70438

KRUMM, H. (Inventor). Chassis for radio receivers. Ger. patent 746257, dated Jun 15, 1944. Application K 145956 VIIIa/21a^4, dated Mar 25, 1937. In German. 1.50
Drawings.

146-147
PB L 70438

LANGE, FRANZ Co., BERLIN. Frame mounting for external-armature electric motors. Ger. patent 746258, dated Jun 8, 1944. Application L 101925 VIIId/21d^1, dated Sep 29, 1940. Inventor: Koennecke, W. In German. 1.50
Drawings.

148-150
PB L 70438

SIEMENS APPARATE U. MASCHINEN G.M.B.H., BERLIN. Small ceramic commutator ring supports. Ger. patent 746259, dated May 24, 1944. Application S 134747 VIIId/21d^1, dated Nov 27, 1938. Inventors: Fielitz, W., & Schlindwein, A. In German. 1.50

151-152
PB L 70438

SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Insulation for exposed electric equipment. Ger. patent 746260, dated Jun 15, 1944. Application S 140938 VIIId/21d^3, dated May 5, 1940. Inventors: Fischer, E., & Bauer, K. In German. 1.50

153-154
PB L 70438

SIEMENS-REINIGER WERKE A. G., BERLIN. X-ray diaphragm. Ger. patent 746262, dated Jun 17, 1944. Application S 127601 IXa/30a, dated Jun 15, 1937. Inventor Mannl, R. In German. 1.50

155-156
PB L 70438

NILSEN, G. (Inventor). Ambulance for four stretchers. Ger. patent 746263, dated Jun 17, 1944. Application N 147759 IXa/30e, dated May 10, 1940. In German. 1.50
Drawing.

157-158
PB L 70438

HEIDENHAIN, J. (Inventor). System of graduation marks for instruments. Ger. patent 746265, dated Jun 17, 1944. Application H 161835 IXb/42c, dated Mar 13, 1940. In German. 1.50

159-161
PB L 70438

COLUMBIA GRAPHOPHONE CO., LTD., LONDON, ENGLAND. Resonant circuit for electro-dynamic sound recorders. Ger. patent 746266, dated Jun 15, 1944. Application C 44513 IXa/42g, dated Mar 10, 1931. In German. 1.50
Diagram and graph.

162-179
PB L 70438

DEUTSCHE HOLLERITH MASCHINEN G.M.B.H., BERLIN. Calculator for division problems. Ger. patent 746267, dated Jun 21, 1944. Application I 56481 IXb/42m, dated Jul 8, 1937. Inventor: Bryce, J. In German. 2.00
Drawings.

180-183
PB L 70438

MERCEDES BÜROMASCHINEN WERKE A.G., BENSHAUSEN. Automatic totaling device for calculators. Ger. patent 746268, dated May 27, 1944. Application M 150488 IXb/42m, dated Apr 5, 1941. In German. 1.50
Drawings. Supplement to patent 736939.

184-187
PB L 70438

MERCEDES BÜROMASCHINEN WERKE A.G., BENSHAUSEN. Automatic decimal point indicator for calculators. Ger. patent 746269, dated Jun 15, 1944. Application M 150542 IXb/42m, dated Apr 10, 1941. In German. 1.50
Drawings. Supplement to patent 691502.

188-189
PB L 70438

EYER, P. (Inventor). Preparation of priming varnishes. Ger. patent 746270, dated Jun 17, 1944. Application E 51507 VIb/48e, dated Aug 21, 1938. In German. 1.50

190-191
PB L 70438

METALLGESELLSCHAFT A. G., FRANKFURT A.M. Phosphatizing process. Ger. patent 746271, dated Jun 17, 1944. Application M 149043 VIa/48d, dated Nov 7, 1940. Inventors: von Schweinitz, H., & Schall, A. In German. 1.50

192-197
PB L 70438
STELLING, F. (Inventor). Method and machine for manufacture of confectionery wrappers. Ger. patent 746272, dated Jul 21, 1944. Application St 59382 VII/54b, dated Jan 20, 1940. In German. 1.50
Drawings.

198-200
PB L 70438
I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Photographic enlarger. Ger. patent 746273, dated Jun 15, 1944. Application I 68512 IXa/57a, dated Dec 22, 1940. Inventors: Huber, K., & Baassner, W. In German. 1.50
Drawings.

201-203
PB L 70438
ZEISS IKON A. G., DRESDEN. Enlarger with mechanical focusing adjustment. Ger. patent 746274, dated Jun 19, 1944. Application Z 26508 IXa/57a, dated Jul 10, 1941. Inventors: Köppenbender, H., et al. In German. 1.50
Drawings.

204-206
PB L 70438
REICHSANSTALT FÜR FILM U. BILD IN WISSENSCHAFT U. UNTERRICHT GEMEINNÜTZIGE G.M.B.H., BERLIN. Optical device for reproduction of motion picture films. Ger. patent 746275, dated Jun 19, 1944. Application R 102143 IXa/57a, dated Apr 23, 1938. Inventor: Fladrich, K. In German. 1.50
Drawing.

207-209
PB L 70438
FINTSCH, JULIUS K. G., BERLIN. Method for indication of rotary motion. Ger. patent 746277, dated Jun 19, 1944. Application P 80969 VIIIb/74b, dated Jul 7, 1940. Inventor: Wilckens, E. In German. 1.50
Diagrams.

210-211
PB L 70438
LOTZIN, JULIUS CHEMISCHE FABRIK, HAMBURG. Method to prevent adhesion of concrete to wooden forms. Ger. patent 746279, dated Jun 17, 1944. Application L 101154 VIb/80b, dated Jun 23, 1940. Inventors: Lotzin, J., & Stenek, W. In German. 1.50

212-213
PB L 70438
ROSENTHAL-ISOLATOREN G.M.B.H., SELB. Apparatus for deaerating ceramic materials. Ger. patent 746278, dated Jun 15, 1944. Application R 108686 VIb/80a, dated Nov 9, 1940. Inventor: Wields, H. In German. 1.50
Drawing.

214-215
PB L 70438
BRANDT, K. (Inventor). Aqueous oil emulsions to prevent adhesion of concrete to forms. Ger. patent 746280, dated Jun 15, 1941. Application B 196355 VIb/80b, dated Dec 6, 1941. In German. 1.50

216-220
PB L 70438
LUBTRAFIL LTD. VALLEY MILLS, NELSON, ENGLAND. Device for guiding continuous single threads over rollers. Ger. patent 746281, dated Jun 15, 1944. Application L 90449 VII/8a, dated May 28, 1936. In German. 1.50
Drawings. Frame 218 is missing.

221-222
PB L 70438
WEBER, L. (Inventor). Method to improve the high-pressure briquetting process without the use of binding agents. Ger. patent 746282, dated Jun 15, 1944. Application W 105146 VIb/10b, dated Feb 22, 1939. In German. 1.50

223-224
PB L 70438
GEBR. BÖHLER & CO. A.G., VIENNA, AUSTRIA. Process for production of steel alloys. Ger. patent 746284, dated Jun 15, 1944. Application B 189419 VIa/18b, dated Dec 22, 1939. Inventor: Krainer, H. In German. 1.50

225-228
PB L 70438
WILSON L. (Inventor). Sheet metal annealing process and furnace. Ger. patent 746285, dated Jun 15, 1944. Application W 97509 VIa/18c, dated Nov 10, 1935. In German. 1.50
Drawings.

229-230
PB L 70438
ALLGEMEINE ELEKTRICITÄTS GES., BERLIN. High-voltage capacitor. Ger. patent 746287, dated Jun 17, 1944. Application A 77857 VII Ic/21g, dated Dec 6, 1935. In German. 1.50
Drawing.

231-232
PB L 70438
HOUTSCHIK, W. (Inventor). Planimeter for skins, etc. Ger. patent 746289, dated Jun 17, 1944. Application H 158475 IXb/42c, dated Jan 31, 1939. In German. 1.50
Drawings.

233-236
PB L 70438
TOBIS TONBILD SYNDIKAT G.M.B.H., BERLIN. Motion picture sound film. Ger. patent 746290, dated Jun 15, 1944. Application D 82652 IXa/42g, dated May 24, 1940. Inventor: Dornbusch, H. In German. 1.50
Drawings.

237-239
PB L 70438
ALLGEMEINE ELEKTRICITÄTS GES., BERLIN. Playback head for magnetic recorders. Ger. patent 746291, dated Jun 15, 1944. Application L 104453 IXa/42g, dated May 31, 1941. Inventors: Schüller, E. In German. 1.50
Drawings.

240-241
PB L 70438
SCHALLBAND SYNDIKAT A. G., BERLIN. Process and equipment for die strips for producing mechanical sound track impressions. Ger. patent 746292, dated Jun 15, 1944. Application T 49063 IXa/42g, dated Aug 19, 1937. Inventor: Westerkamp, H. In German. 1.50
Supplement to patent 722358.

242-247
PB L 70438
MERCEDES BÜROMASCHINEN WERKE A.G., BENSHAUSEN. Counter locking mechanism for calculating machines. Ger. patent 746293, dated Jul 21, 1944. Application M 139398 IXb/42m, dated Oct 7, 1937. In German. 1.50
Drawings.

248-251
PB L 70438
MERCEDES BÜROMASCHINEN WERKE A.G., BENSHAUSEN. Totaling device with automatic decimal point indication for vertical and horizontal counting mechanisms. Ger. patent 746294, dated Jun 15, 1944. Application M 142691 IXb/42m, dated Sep 6, 1938. In German. 1.50
Drawings. Supplement to patent 730661.

252-256
PB L 70438
DEUTSCHE HOLLERITH MASCHINEN, G.M.B.H., BERLIN. Method and machine for sorting punch-cards. Ger. patent 746295, dated Aug 1,

1944. Application D 78032 IXb/43a, dated May 24, 1936. Inventor: Maul, M. In German. 1.50
Drawings.

259-260 PB L 70438 — LÜHN, O. (Inventor). Shutter control for cameras. Ger. patent 746296, dated Jul 21, 1944. Application N 44826 IXa/57a, dated Jun 13, 1941. In German. 1.50
Diagram.

261-263 PB L 70438 — VAN GRIES, A. (Inventor). Apparatus for mixing fibrous materials with powdered binding agents. Ger. patent 746297, dated Jun 15, 1944. Application G 82635 VIb/80a, dated May 14, 1932. In German. 1.50
Drawings.

264-265 PB L 70438 — BERLINER GIPSWERKE L. MUNDT, BERLIN. Process for production of materials with high-insulating properties. Ger. patent 746298, dated Jun 15, 1944. Application B 182638 VIb/80b, dated Mar 26, 1938. Inventor: Kühne, F. In German. 1.50

266-267 PB L 70438 — KREIDLER'S METALL U. DRAHTWERKE G.M.B.H., STUTTGART. Manufacturing process for cartridge cases. Ger. patent 746299, dated Jun 15, 1944. Application K 144326 Ib/7b, dated Nov 7, 1936. In German. 1.50

268-269 PB L 70438 — DEUTSCHE RÖHRENWERKE A. G., DÜSSELDORF. Manufacturing process for multi-layered hollow bodies in which hoop iron is spirally wrapped around a liner. Ger. patent 746300, dated Jul 21, 1944. Application D 79191 Ib/7b, dated Nov 2, 1938. Inventor: Heinemann, J. In German. 1.50
Drawings.

270-272 PB L 70438 — THANNER, AUGUST. (Inventor). Process for utilization of the heat resulting from the drying of peat briquettes. Ger. patent 746301, dated Jun 19, 1944. Application T 52044 VIb/10c, dated Apr 2, 1939. In German. 1.50
Drawing.

273-274 PB L 70438 — JAUBERT, G. (Inventor). Gas drying process. Ger. patent 746302, dated May 24, 1944. Application J 52494 IVb/12e, dated Jun 5, 1935. In German. 1.50

275-277 PB L 70438 — SIEMENS-LURGI-COTTRELL ELEKTRO-FILTER G.M.B.H. FÜR FORSCHUNG U. PATENTVERWALTUNG, BERLIN. High-voltage leads for electric filters. Ger. patent 746303, dated Jul 21, 1944. Application S 129606 IVb/12 e, dated Nov 20, 1937. Inventor: Hoss, F. In German. 1.50
Drawings.

278-279 PB L 70438 — I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Production of hydrocarbon oils suitable as insulating oils. Ger. patent 746304, dated Jul 21, 1944. Application I 58456 IVd/12c, dated Jul 7, 1937. Inventors: Huber, H., & Hirschbeck, J. In German. 1.50

280-281 PB L 70438 — CHEMISCHE FABRIK STOCKHAUSEN & CIE, KREFELD. Preparation of condensation products from wool-fat acids and animal glue decomposition products. Ger. patent 746306, dated Jul 21, 1944. Application C 48043 IVa/12p, dated Jun 29, 1933. Inventor: Strauch, G. In German. 1.50
Supplement to patent 730885.

282-283 PB L 70438 — TEMMLER WERKE VEREINIGTE CHEMISCHE FABRIKEN HERMANN TEMMLER, BERLIN. Production of basic phenol ethers. Ger. patent 746308, dated Jul 21, 1944. Application D 71516 IVa/12g, dated Nov 20, 1933. Inventors: Keil, F., & Dobke, W. In German. 1.50

284-285 PB L 70438 — WEISS, K., & SCHLENDER, E. (Inventors). Water-level indicator for boilers. Ger. patent 746309, dated Jun 19, 1944. Application W 106449 X/13c, dated Oct 24, 1939. In German. 1.50
Drawing.

286-288 PB L 70438 — GROSSER, G. F. CO., MARKERSDORF. Noiseless carriage return for typewriters. Ger. patent 746310, dated Jun 19, 1944. Application G 92537 XII/15g, dated Mar 27, 1936. In German. 1.50
Drawings.

289-291 PB L 70438 — SVENSKA AKTIEBOLOGET BROMSREGULATOR, MALMÖ, SWEDEN. Operating mechanism for automatic dual action brake-rod lever. Ger. patent 746311, dated Jun 19, 1944. Application S 132120 II/20f, dated May 17, 1936. In German. 1.50
Drawings.

292-295 PB L 70438 — PINTSCH, JULIUS K. G., BERLIN. Single track railroad crossing signal. Ger. patent 746312, dated Jun 10, 1944. Application N 37795 II/20i, dated Feb 20, 1935. In German. 1.50
Wiring diagrams.

296-297 PB L 70438 — MASCHINENFABRIK OERLIKON, ZURICH, SWITZERLAND. Control for D.C. operated vehicles with autotransformer circuit. Ger. patent 746313, dated Aug 1, 1944. Application M 149419 VIIId/20i, dated Dec 14, 1940. Inventor: Degen, G. In German. 1.50
Wiring diagrams.

298-300 PB L 70438 — FERNSEH G.M.B.H., BERLIN. Device to measure frequency response of a test cell for cathode ray tubes. Ger. patent 746314, dated Aug 1, 1944. Application F 87419 VIIIa/21a^2, dated Sep 13, 1939. Inventor: Schuster, H. In German. 1.50
Wiring diagram.

301-306 PB L 70438 — TELEFONBAU U. NORMALZEIT G.M.B.H., FRANKFURT A. M. Circuit for dial telephone extension systems. Ger. patent 746315, dated Aug 1, 1944. Application W 94518 VIIIa/21a^3, dated Jun 22, 1934. In German. 1.50
Wiring diagram.

307-309 PB L 70438 — ALLGEMEINE ELEKTRICITÄTS GES., BERLIN. Weatherproof circuit with cylindrical bus bar housing. Ger. patent 746316, dated Aug 1, 1944. Application A 84061 VIIIb/21c, dated Aug 28, 1937. Inventor: Kirchoff, F. In German. 1.50
Drawings.

310-311 — SIEMENS-REINIGER WERKE A. G.,

PB L 70438 — BERLIN. Ammeter safety device for X-ray installations. Ger. patent 746320. Application S 137191 VIIIc/21g, dated May 25, 1939. Inventor: Silbermann, K. In German. 1.50
Wiring diagrams.

312-313
PB L 70438 — SCHÖBERLE, F. (Inventor). Electric hot water tank. Ger. patent 746321, dated Aug 1, 1944. Application Sch 108875 VIIIc/21h, dated Jan 5, 1936. In German. 1.50
Drawing.

314-315
PB L 70438 — SCHELLENBERG, M. (Inventor). Fire resistant paint. Ger. patent 746322, dated Aug 1, 1944. Application Sch 116630 IVc/22g, dated Sep 14, 1938. In German. 1.50

316-318
PB L 70438 — HEMPEL, F. (Inventor). Synthetic linseed oil varnish. Ger. patent 746323, dated Jun 15, 1944. Application H 153652 IVc/22h, dated Nov 14, 1937. In German. 1.50

319-320
PB L 70438 — BÖHME FETTCHEMIE G.M.B.H., CHEMNITZ. Decalcification process for hides. Ger. patent 746324, dated Jul 21, 1944. Application B 190240 IVd/28a, dated Mar 24, 1940. Inventors: Schmitt, F., & Mannes, L. In German. 1.50

321-322
PB L 70438 — I. G. FARBENINDUSTRIE A. G., FRANKFURT, A. M. Production of cellulose fiber mixtures of various types of fibers and staple lengths. Ger. patent 746325, dated Jul 21, 1944. Application I 58517 VII/29a, dated Jul 15, 1937. Inventors: Kleine, J., et al. In German. 1.50

323-325
PB L 70438 — HANSEN, J. (Inventor). Adjustment for invalid chairs. Ger. patent 746326, dated Jul 29, 1944. Application H 164656 IXa/30e, dated Feb 22, 1941. In German. 1.50
Drawings.

326-327
PB L 70438 — SOKOLOFF, S. (Inventor). Piezoelectric method and device for detection of defects in solid objects. Ger. patent 746329, dated Jun 19, 1944. Application S 127111 IXb/42k, dated May 4, 1937. In German. 1.50

328-333
PB L 70438 — MERCEDES BÜROMASCHINEN WERKE A.G., BENSHAUSEN. Calculating machine with turnover gear. Ger. patent 746330, dated Jun 15, 1944. Application M 134517 IXb/42m, dated May 16, 1936. In German. 1.50
Drawings.

334-337
PB L 70438 — SCHWELMER EISENWERK MÜLLER & CO., SCHWELM. Price indicator for fuel pumps. Ger. patent 746331, dated Jul 29, 1944. Application Sch 120721 IXb/42p, dated Jul 13, 1940. Inventor: Grünvogel, V. In German. 1.50
Drawings.

338-341
PB L 70438 — DEUTSCHE HOLLERITH MASCHINEN G.M.B.H., BERLIN. Printing device with type gears. Ger. patent 746332, dated Jun 19, 1944. Application I 59782 IXb/43a, dated Dec 1, 1937. Inventor: Fuller, F. In German. 1.50
Drawings.

342-343 — I. G. FARBENINDUSTRIE A. G.,

PB L 70438 — FRANKFURT A. M. Process to produce uniform surface appearance in die and pressure cast magnesium alloys. Ger. patent 746333, dated Jul 29, 1944. Application I 66830 VIa/48d, dated Apr 10, 1940. Inventors: Hachtigall, E., & König, K. In German. 1.50

344-345
PB L 70438 — ROWE, M. (Inventor). Machine for manufacture of reinforced perforated paper bags. Ger. patent 746334, dated Jun 19, 1944. Application R 102445 VII/5[illegible]b, dated Oct 8, 1937. In German. 1.50
Drawings.

346-347
PB L 70438 — QUARZLAMPEN G.M.B.H., HANAU. Contact cloth for photostatic processing equipment. Ger. patent 746335, dated Jul 29, 1944. Application Q 2213 IXa/57c, dated Feb 28, 1937. Inventor: Jollasse, E. In German. 1.50

348-349
PB L 70438 — ROSENTHAL ISOLATOREN G.M.B.H., SELB. Process for production of dross. Ger. patent 746338, dated Aug 1, 1944. Application R 100262 VIb/80b, dated Sep 16, 1937. In German. 1.50

350-351
PB L 70438 — I. G. FARBENINDUSTRIE A. G., FRANKFURT A. M. Regeneration of the hydroxyl ion exchange filter in apparatus for freeing water from salt. Ger. patent 746339, dated Aug 1, 1944. Application I 58431 IVb/85b, dated Nov 25, 1936. Inventor: Pattoch, K. In German. 1.50

352-353
PB L 70438 — HONNEF, H. (Inventor). Large wind power plant with coaxial main wheel and auxiliary wheel. Ger. patent 746340, dated Jul 29, 1944. Application H 150938 Ia/88c, dated Mar 7, 1937. In German. 1.50
Drawing.

354-355
PB L 70438 — JUNGHANS, S. (Inventor). Rolling out zinc alloys with more than 75% zinc content. Ger. patent 746342, dated Aug 1, 1944. Application J 64797 Ib/7a, dated Jun 8, 1939. In German. 1.50

356-358
PB L 70438 — ZIMMER'S, FRANZ ERBEN K. G., WARNSDORF. Device for uniform stretching of fabrics on frames, especially for film printing stencils. Ger. patent 746343, dated Nov 9, 1944. Application Z 26499 VII/8c, dated Jul 2, 1941. In German. 1.50
Drawings.

359-360
PB L 70438 — MONFORTS, JOSEPH M.GLADBACH. Device for linear measurement of textiles. Ger. patent 746344, dated Jul 29, 1944. Application M 146477 VII/8f, dated Nov 16, 1939. In German. 1.50
Drawing.

361-363
PB L 70438 — KOPPERS, HEINRICH G.M.B.H., ESSEN. Device for loading dust-laden coal in horizontal coking chambers. Ger. patent 746345, dated Jul 21, 1944. Application K 161044 VIb/10a, dated May 9, 1941. Inventor: Koppers, H. In German. 1.50
Drawings.

364-365
PB L 70438 — GES. FÜR KOHLENTECHNIK M.B.H., DORTMUND. Extraction of coke from tar or pitch for production of

electrodes. Ger. patent 746346, dated Aug 1, 1944. Application G 103007 VIb/10a, dated Feb 13, 1941. Inventor: Keller, K. In German. 1.50

366-368
PB L 70438
KOPPERS, HEINRICH G.M.B.H., ESSEN. Process for low-temperature carbonization of bituminous fuels by means of rinsing gas. Ger. patent 746347, dated Jul 21, 1944. Application K 150172 VIb/10a, dated Apr 2, 1938. Inventor: Koppers, H. In German. 1.50
Drawing.

369-371
PB L 70438
ALBRECHT, JOHANN & GERCKE, MAXIMILLIAN, HAMBURG. Conveyor system for bituminous materials in low-temperature carbonising chambers. Ger. patent 746348, dated Jul 21, 1944. Application A 94425 VIb/10a, dated Nov 6, 1941. Inventor: Gercke, M. In German. 1.50
Drawing.

372-373
PB L 70438
ERLENBACH, L. ET AL (Inventors). Peat dehydration process. Ger. patent 746349, dated Jul 29, 1944. Application E 51597 VIb/10c, dated Sep 11, 1938. In German. 1.50

374-375
PB L 70438
DR. C. OTTO & CO. G.M.B.H., BOCHUM. Process for preparation of aqueous ammoniacal solutions. Ger. patent 746350, dated Aug 3, 1944. Application O 23952 IVb/12k, dated Dec 22, 1938. Inventor: Rühl, G. In German. 1.50
Diagram.

376-378
PB L 70438
I. G. FARBENINDUSTRIE A. G. FRANKFURT A. M. Preparation of partially hydrogenated aromatic hydrocarbons. Ger. patent 746352, dated Jul 21, 1944. Application I 63286 IVc/12o, dated Dec 24, 1938. Inventor: Schmidt, J. In German. 1.50

379-382
PB L 70438
DEUTSCHE EDELSTAHLWERKE A. G., KREFELD. Device for electro-inductive surface hardening of metal parts. Ger. patent 746353, dated Jul 21, 1944. Application D 84550 IVa/18c, dated Mar 6, 1941. In German. 1.50
Drawings.

383-385
PB L 70438
SCHILDE, BENNO MASCHINENBAU A. G. HERSFELD. Steel-wire annealing process and equipment. Ger. patent 746354, dated Aug 1, 1944. Application Sch 122635 IVa/18c, dated May 29, 1941. Inventors: Stassinet, T., & Hilgers, W. In German. 1.50
Drawings. Supplement to patent 738928.

386-388
PB L 70438
TELEFONBAU U. NORMALZEIT G.M.B.H., FRANKFURT A. M. Circuit for dial telephone extension systems. Ger. patent 746355, dated Jul 29, 1944. Application F 71493 VIIIa/21a^3, dated Jul 23, 1932. Inventor: Heibel, E. In German. 1.50
Wiring diagrams.

389-391
PB L 70438
TELEFONBAU U. NORMALZEIT G.M.B.H. FRANKFURT A. M. Telephone device for renewal of received impulses by means of two channels. Ger. patent 746356, dated Aug 1, 1944. Application T 52367 VIIIa/21a^3, dated Jun 11, 1939. Inventor: Hebel, M. In German. 1.50
Wiring diagram.

392-394
PB L 70438
TELEFONBAU U. NORMALZEIT G.M.B.H. FRANKFURT A. M. Circuit for dial telephone systems. Ger. patent 746357, dated Aug 1, 1944. Application T 51905 VIIIa/21a^3, dated Mar 9, 1939. Inventor: Hebel, M. In German. 1.50
Wiring diagrams. Supplement to patent 688086.

395-397
PB L 70438
BLAUPUNKT WERKE G.M.B.H., BERLIN. Indicator arrangement for radio receiver dials. Ger. patent 746358, dated Aug 3, 1944. Application I 61738 VIIIa/21a^4, dated Jun 28, 1938. Inventors: Mansch, H., & Grötzman, H. In German. 1.50

398-401
PB L 70438
HEPEL, K. (Inventor). Automatic gear ratio adjustment for an electric drive coupled to an internal combustion engine. Ger. patent 746359, dated Jun 15, 1944. Application H 159911 VIIId/21d^1, dated Jun 23, 1939. In German. 1.50
Drawings.

402-404
PB L 70438
AUTO UNION A. G., CHEMNITZ. Pole mounting in the yoke of automotive generators. Ger. patent 746360, dated Jul 21, 1944. Application A 90268 VIIId/21d^1, dated Sep 23, 1939. Inventors: Bergmann, E., & Erhardt, H. In German. 1.50
Drawings.

405-406
PB L 70438
CONRODTY, C. & CO., NÜRNBERG. Commutator with synthetic carbon segments. Ger. patent 746361, dated Aug 1, 1944. Application C 54884 VIIId/21d^1, dated Mar 17, 1939. Inventors: Zöllner, H., & Voegler, P. In German. 1.50
Drawing.

407-409
PB L 70438
DIETRICH, GERHARD CO., DRESDEN. Brush holder for generators. Ger. patent 746362, dated Aug 1, 1944. Application D 86623 VIIId/21d^1, dated Dec 21, 1941. Inventor: Dietrich, G. In German. 1.50

410-412
PB L 70438
BUCHHOLZ, M. (Inventor). Safety device for liquid-insulated electrical equipment sensitive to gases and vapors. Ger. patent 746364, dated Aug 1, 1944. Application B 190189 VIIId/21d^3, dated Mar 17, 1940. In German. 1.50
Diagrams.

413-414
PB L 70438
SIEMENS SCHUCKERTWERKE A. G., BERLIN. Arc safety device for bus bars. Ger. patent 746365, dated Aug 1, 1944. Application S 124224 VIIId/21d^3, dated Sep 18, 1936. Inventors: Kraft, G. In German. 1.50
Diagram.

415-417
PB L 70438
N. V. FABRIEK VAN ELECTRISCHE APPARATEN, HENGELO, HOLLAND. Plastic dielectric capacitor. Ger. patent 746366, dated Aug 3, 1944. Application N 41573 VIIIc/21g, dated Jan 21, 1938. Inventor: Janssen, A. In German. 1.50
Drawings.

418-419
PB L 70438
NSF NÜRNBERGER SCHRAUBENFABRIK U. ELECKTROWERK G.M.B.H., NÜRNBERG. Process for production of anodes for electrolytic capacitors. Ger. patent 746367, dated Aug 3, 1944. Application M 131487 VIIIc/21g, dated Jul 7, 1935. In German. 1.50

420-421 PB L 70438 — PHILIPS PATENTVERWALTUNG G.M.B.H., BERLIN. Electrolytic capacitor for operating voltages of more than 400V, whose electrolyte contains ethylene glycol boric acid and a monovalent organic or inorganic base. Ger. patent 746368, dated Aug 3, 1944. Application N 40316 VIIIc/21g, dated Jan 30, 1937. Inventors: Claassen, A., & Basart, J. In German. 1.50

422-423 PB L 70438 — WALTA, G. (Inventor). Mechanically controlled vacuum tube. Ger. patent 746369, dated Aug 3, 1944. Application W 101230 VIIIc/21g, dated Jun 3, 1937. In German. 1.50
Diagram.

424-426 PB L 70438 — REUSSE, W. (Inventor). Device for supplementary proportional cathode ray deflection. Ger. patent 746370, dated Aug 3, 1944. Application R 103369 VIIIc/21g, dated Sep 21, 1938. In German. 1.50
Diagrams.

427-429 PB L 70438 — SCHREIBER-GASTELL, R., & FORMHALS, A. (Inventors). Process and equipment for production of synthetic fibers from acetyl cellulose. Ger. patent 746373, dated Aug 3, 1944. Application Sch 118396 VII/29a, dated May 14, 1939. In German. 1.50
Diagram. Supplement to patent 689870.

430-431 PB L 70438 — MASCHINENFABRIK HARTMANN A. G., OFFENBACH. Pneumatic loading process for xanthate machines or sulfidising drums. Ger. patent 746374, dated Aug 1, 1944. Application M 149743 VII/29a, dated Jan 24, 1941. Inventor: Lotz, E. In German. 1.50

432-436 PB L 70438 — INDUSTRIAL RAYON CORP. CLEVELAND, OHIO. Winding and conveying device for rayon threads. Ger. patent 746375, dated Jun 10, 1944. Application I 46557 VII/29a, dated Feb 18, 1933. In German. 1.50
Drawings.

437-438 PB L 70438 — KULZER & CO. G.M.B.H., FRANKFURT A.M. Dentures. Ger. patent 746376, dated Jun 19, 1944. Application K 159206 IXa/30b, dated Nov 7, 1940. Inventor: Roth, G. In German. 1.50

439-441 PB L 70438 — FERSTER, C. (Inventor). Tampon. Ger. patent 746377, dated Jul 21, 1944. Application F 89516 IXa/30d dated Feb 20, 1941. In German. 1.50
Drawings.

442-444 PB L 70438 — ALGEMEENE KUNSTVEZEL MAATSCHAPPIJ N.V. SCHEVENINGEN, HOLLAND. Process and equipment for production of fiberglas. Ger. patent 746378, dated Aug 3, 1944. Application A 89982 VIb/32a, dated Aug 4, 1939. Inventors: Slayter, G., & Thomas, J. In German. 1.50
Drawings.

445-446 PB L 70438 — KRUSE, GEBR. K.G., MELLE. Cupboard. Ger. patent 746379, dated Jul 29, 1944. Application K 157507 X/34i, dated May 8, 1940. In German. 1.50
Drawings.

447-449 — HEINEMANN, P. (Inventor).

PB L 70438 — Current supply for crane runways. Ger. patent 746380, dated Aug 3, 1944. Application B 188257 VIIId/35b, dated Aug 4, 1939. In German. 1.50
Drawings.

450-452 PB L 70438 — DR. ALEXANDER WACKER GES. FÜR ELEKTROCHEMISCHE INDUSTRIE G.M.B.H., MUNICH. Porous filters, diaphragms, etc. Ger. patent 746381, dated Aug 5, 1944. Application R 102332 IVc/39b, dated May 17, 1938. Inventor: Rudolph, H. In German. 1.50

453-454 PB L 70438 — SCHAUKAL, R. (Inventor). Curved ruler. Ger. patent 746382, dated Jul 29, 1944. Application Sch 123011 IXb/42a, dated Aug 7, 1941. In German. 1.50
Drawings.

455-456 PB L 70438 — BROWN, BOVERI & CIE A. G., MANNHEIM. Conductors consisting of carbon collector ring and brushes. Ger. patent 746983, dated Sep 1, 1944. Application B 190661 VIIId/21d[1], dated Jun 12, 1938. Inventor: Fleischmann, K. In German. 1.50

457-460 PB L 70438 — PHOTOGRAMMETRIE G.M.B.H., MUNICH. Protractor for photogrammetry. Ger. patent 746384, dated Jun 19, 1944. Application P 78269 IXb/42c, dated Nov 30, 1938. Inventor: Zurlinden, R. In German. 1.50
Drawings.

461-463 PB L 70438 — SCHÄFFER & BUDENBERG G.M.B.H., MAGDEBURG. Flow meter for liquids and gases. Ger. patent 746386, dated Jul 29, 1944. Application Sch 122213 IXb/42e, dated Mar 23, 1941. Inventor: Lotzas, R. In German. 1.50
Drawings.

464-466 PB L 70438 — MAHLKUCH, E. (Inventor). Automatic weighing machine. Ger. patent 746387, dated Aug 1, 1944. Application M 151144 IXb/42f, dated Jun 17, 1941. In German. 1.50
Drawing.

467-468 PB L 70438 — HELMING, B. (Inventor). Dosing scale for constant flow of materials. Ger. patent 746388, dated Aug 1, 1944. Application H 160201 IXb/42f, dated Jul 25, 1939. In German. 1.50
Drawings.

469-471 PB L 70438 — JOKSCH, R. (Inventor). Balance with safety pressure device. Ger. patent 746389, dated Aug 1, 1944. Application J 71375 IXb/42f, dated Jan 20, 1942. In German. 1.50
Drawing.

472-473 PB L 70438 — TOBIS TONBILD SYNDIKAT G.M.B.H., BERLIN. Method and device for conversion of simple sound recordings with stereophonic recordings. Ger. patent 746390, dated Aug 1, 1944. Application T 55339 IXa/42g, dated Apr 20, 1941. Inventor: Hatschek, P. In German. 1.50
Drawing.

474-476 PB L 70438 — MAGNUS, R. (Inventor). Screening device for measuring transparency. Ger. patent 746395, dated Aug 5, 1944. Application M 139741 IXa/42h, dated Nov 9, 1937. In German. 1.50
Drawings.

477-478
PB L 70438 — BRENNITZ, R. (Inventor) Device for complete or partial extinction of light rays. Ger. patent 746396, dated Aug 1, 1944. Application K 149861 IXa/42h, dated Mar 9, 1938. In German. 1.50
Diagram.

479-481
PB L 70438 — LINSER, G. (Inventor). Frame for diapositives. Ger. patent 746397, Aug 10, 1944. Application L 100717 IXa/42h, dated Apr 27, 1944. In German. 1.50
Drawings.

482-484
PB L 70438 — SIEMENS-SCHUCKERTWERKE A. G., BERLIN. Device to permit observation of area of variable intensity in searchlights, etc. Ger. patent 746399, dated Aug 3, 1944. Application S 149440 IXa/42h, dated Mar 6, 1942. Inventor: Becken, O. In German. 1.50

485-487
PB L 70438 — BRANDMAYER, C. (Inventor). Method for producing highly-luminous sparks in rapid succession for stroboscopic purposes. Ger. patent 746400, dated Aug 3, 1944. Application B 186322 IXa/42h, dated Feb 15, 1939. In German. 1.50
Diagrams.

TECHNICAL ORDERS

MISCELLANEOUS

PB L 42001-R. U. S. ARMY AIR FORCES. Administrative - Air Force stock number system. (Revision of PB 42001). (Tech Order 00-35A-8). Nov 1947. 38 p. Price: Microfilm-$1.00 - Photostat-$3.00

PB L 39693-R2. U. S. ARMY AIR FORCES. Distribution of technical orders, supply catalogs (stock lists) and special publications. (Supersedes issue of July 25, 1946, PB 39693, and issue of May 8, 1947, PB 39693-R). (Tech Order 00-5-2). Jan 1948. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87201. U. S. ARMY AIR FORCES. Set: Depot unit, Army. (Tech Order 00-30-248). 19 p. Price: Microfilm-$1.25 - Photostat-$2.00

PB L 81935. U. S. ARMY AIR FORCES. Set: Development and experimental, photographic, control, geodetic. (Tech Order 00-30-935). Feb 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81922. U. S. ARMY AIR FORCES. Set: Development, ground radio, ground communications. (Tech Order 00-30-939). Feb 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81932. U. S. ARMY AIR FORCES. Set: Hangar, installation, equipment, airborne communications. (Tech Order 00-30-762). Feb 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87166. U. S. ARMY AIR FORCES. Set - Maintenance, field, AACS. (Tech Order 00-30-349). Oct 1947. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 40148-R. U. S. ARMY AIR FORCES. Set: Maintenance, field, sheet metal and plastics. (Revision of PB 40148). (Tech Order 00-30-328). Oct 1947. 9 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87191. U. S. ARMY AIR FORCES. Set: Maintenance, mobile training unit. (Tech Order 00-30-1128). Oct 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 39613-R. U. S. ARMY AIR FORCES. Set - maintenance, organizational, basic (tactical). (Supersedes part of PB 39613) (Tech Order 00-30-19) Sep 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87189. U. S. ARMY AIR FORCES. Set: Mobile training unit, B-29 airplane. (Tech Order 00-30-1060). Oct 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87165. U. S. ARMY AIR FORCES. Set: Mobile training unit - C-54 airplane. (Tech Order 00-30-1063). Oct 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87199. U. S. ARMY AIR FORCES. Set: Mobile training unit-C-82 airplane. (Tech Order 00-30-1064). Oct 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87187. U. S. ARMY AIR FORCES. Set: Mobile training unit, P-47 airplane. (Tech Order 00-30-1065). Oct 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87174. U. S. ARMY AIR FORCES. Set: Mobile training unit, P-51 airplane. (Tech Order 00-30-1066). Oct 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87175. U. S. ARMY AIR FORCES. Set: Mobile training unit, P-80 airplane. (Tech Order 00-30-1068). Oct 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 39611-R. U. S. ARMY AIR FORCES. Set - photographic group and squadron, light bombardment. (Supersedes PB 39611). (Tech Order 00-30-200). Dec 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81921. U. S. ARMY AIR FORCES. Set: Test, electronic units and components, ground communications. (Tech Order 00-30-1029). Feb 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81928. U. S. ARMY AIR FORCES. Set: Testing, tropicalisation, equipment, airborne communications. (Tech Order 00-30-765). Feb 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80950. U. S. ARMY AIR FORCES. Set - Tool, supply and issue, local, bombardment type aircraft, flight test. (Tech Order 00-30-1073). Feb 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80952. U. S. ARMY AIR FORCES. Set - Tool, supply and issue, local, instrumentation, flight test. (Tech Order 00-30-1056). Feb 1947. 7 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80426. U. S. ARMY AIR FORCES. Set: Training, individual, cable splicer, telephone and telegraph. (Tech Order 00-30-1007). Apr 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87186. U. S. ARMY AIR FORCES. Set: Training, individual, clerk, technical, finance. (Tech Order 00-30-1041). Oct 1947. 1 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80537. U. S. ARMY AIR FORCES. Set - Training, individual, installer-repairman, telephone and telegraph. (Tech Order 00-30-1008). Apr 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80495. U. S. ARMY AIR FORCES. Set - Training, individual, lineman, telephone and telegraph. (Tech Order 00-30-1009). Apr 1947. 4 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87168. U. S. ARMY AIR FORCES. Set: Training, individual, mechanic, automotive equipment. (Tech Order 00-30-1130). Oct 1947. 12 p. Price: Microfilm-$1.25 - Photostat-$2.00

PB L 81936. U. S. ARMY AIR FORCES. Set: Training, individual, mechanic, construction equipment. (Tech Order 00-30-1085). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81923. U. S. ARMY AIR FORCES. Set: Training, individual, mechanic, Diesel. (Tech Order 00-30-1086). Jul 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81934. U. S. ARMY AIR FORCES. Set: Training, individual, mechanic, refrigeration. (Tech Order 00-30-1087). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81920. U. S. ARMY AIR FORCES. Set: Training, individual, officer, aerial, photographic. (Tech Order 00-30-1108). Jul 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81918. U. S. ARMY AIR FORCES. Set: Training, individual, officer, air installation. (Tech Order 00-30-1088). Jul 1947. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87190. U. S. ARMY AIR FORCES. Set: Training, individual, officer, telephone and telegraph. (Tech Order 00-30-1069). Oct 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 80428. U. S. ARMY AIR FORCES. Set: Training, individual, operator, radio, CNS. (Tech Order 00-30-1005). Apr 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81926. U. S. ARMY AIR FORCES. Set: Training, individual, photographer, aerial. (Tech Order 00-30-1112). Jul 1947. 5 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81925. U. S. ARMY AIR FORCES. Set: Training, individual, photographer, ground. (Tech Order 00-30-1109). Jul 1947. 3 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81938. U. S. ARMY AIR FORCES. Set: Training, individual, photolithographer. (Tech Order 00-30-1099). Jul 1947. 2 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 81915. U. S. ARMY AIR FORCES. Set: Training, individual, powerman. (Tech Order 00-30-1100). Jul 1947. 6 p. Price: Microfilm-$1.00 - Photostat-$1.00

PB L 87167. U. S. ARMY AIR FORCES. Set: Training, individual, repairman, automotive. (Tech Order 00-30-1131). Oct 1947. 15 p. Price: Microfilm-$1.25 - Photostat-$2.00

PB L 87126. U. S. ARMY AIR FORCES. Technical order supply catalog (stock list) and special publications system. (Tech Order 00-5-1). Dec 1947. 19 p. Price: Microfilm-$1.25 - Photostat-$2.00

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